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ABSTRACT

Sixty tables are presented, which examine the test achievement of a national probability sample of eighth graders in public and private schools. Statistics were obtained from the base-year student survey of the National Education Longitudinal Study of 1988 (NELS:88). The NELS:88 monitors the transition of a national sample of young adults as they progress from junior high to senior high school and on to postsecondary education and/or work. Its purpose is to provide policy-relevant data concerning the effectiveness of schools, curriculum paths, special programs, variations in curriculum content, and/or mode of delivery in bringing about educational growth. The NELS:88 test battery includes four tests: (1) reading comprehension; (2) mathematics; (3) science; and (4) history/citizenship/government. This report is a tabular summary of achievement test scores for approximately 25,000 eighth graders from slightly more than 1,000 schools. Results are grouped into: student background variables; parental involvement variables; and school characteristics and school climate. Reading and mathematics tables contain, in addition to mean scores, the percentage of each group scoring at each proficiency level and the standard error of the percentage estimate. Effect sizes are included to compare group differences. Technical notes on survey design, response rates, variables in the tables, significance testing, and methods for estimating standard errors and effect sizes follow the tables. (SLD)

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E.D. TABS April 1991

The Tested Achievement of the National Education Longitudinal Study of 1988 Eighth Grade Class

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April 1991

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HIGHLIGHTS

Mathematics Performance

Even though about 80 percent of eighth graders have reached the "basic" level in mathematics (addition, subtraction, multiplication and division), one out of five is unable to perform such everyday arithmetic tasks.

- About 40 percent show proficiency at the intermediate math level or above. This level is associated with knowledge of decimals, fractions and percents, which are reported to be major topics in junior highs and high schools.

- Nineteen percent overall are proficient at the advanced mathematics level (simple problem solving, conceptual understanding).

Reading Performance

Eighty-six percent of eighth graders show basic reading proficiency (when asked to respond to a sample reading passage, they are able to reproduce detail or the author's main thought). Fourteen percent of students overall are unable to perform such basic reading comprehension tasks.

- Only about one-third overall (34 percent) are proficient at the advanced level (able to make inferences beyond the author's main thought, to summarize, or make generalizations).

- Forty-three percent of limited-English-proficient students fail to show basic reading skills.

Class Type Differences

The type of class a student attends is an important factor in his or her achievement. In particular, attending an algebra or other advanced math class in eighth grade is related to higher achievement, and attending a "regular" English class is related to higher achievement.

- There are large mean differences in test performance in mathematics in favor of students taking an algebra or other advanced math class when compared to those taking a regular math or remedial math course.

- Students who are in an algebra or other advanced math class are more than four times as likely as students in a regular math class to be proficient at higher level math problem solving (42 percent vs. 9 percent).

- Students planning to take an academic or college preparatory program in high school are twice as likely as their peers with plans for the general track to perform at the advanced level in math (35 percent vs. 18 percent).

- Students who report taking "regular" English are almost 50 percent more likely than students in remedial English to show proficiency at the advanced level in reading (37 percent vs. 26 percent).

Homework and Reading

There is a relationship between time spent doing homework and reading and tested achievement.

- Students who report doing 3 hours or more of math homework per week score about twice as high on the math test as students reporting doing no homework (mean score of 23 vs. 12). They are also three times as likely as those doing no math homework to show proficiency at higher level math problem solving (39 percent vs. 12 percent).

- Students who do 3 hours or more of outside reading per week are twice as likely as students who do no outside reading to be proficient at the advanced math and reading levels. (reading: 51 vs. 21 percent; math: 27 vs. 11 percent).

- Students who never or rarely watch T.V. are twice as likely as those who watch T.V. 4 or more hours a day to be proficient at the advanced mathematics level (27 percent vs. 12 percent).

Parental Involvement

It is clear that parental involvement in a child's education is a crucial factor in promoting academic achievement. Parent discussions with students about school work and programs matter in their children's lives.

- Eighth graders who discuss their studies or courses with their parents three or more times are twice as likely as those who never do so to score at the advanced level in math (25 percent vs. 10 percent).

- Students who plan their high school program with their mother or father three or more times are twice as likely as those who never do so to show proficiency at the advanced level in math (22 percent vs. 11 percent).

Educational Aspirations

In past research with High School and Beyond, high school educational aspirations and plans were found to predict later achievement and attainment. NELS:88 finds that early aspirations relate to eighth grade achievement.

- Eighth graders whose parents expect them to graduate from college (or go to graduate school) are seven times as likely as their peers whose parents expect them to get a high school diploma or less to perform at the advanced level in math (24 percent vs. 3 percent).

- Students who expect to graduate from college are seven times as likely as those expecting only to finish high school to perform at the advanced level in math (21 percent vs. 3 percent) and three times as likely to perform at the advanced reading level (38 percent vs. 13 percent).

School Sector Differences

As found in prior research, there are distinct differences in achievement among the four school sectors (public, Catholic, private independent (non-sectarian), and private religious).

- Students from private independent schools perform considerably better on all tests than students from Catholic or public schools.

- Students in private independent schools are more likely than public or Catholic school students to be proficient at higher level math problem solving (private independent: 63 percent; public: 18 percent, Catholic: 19 percent).

- Students from Catholic schools have higher mean scores in all tested areas (except higher-level math problem solving) than do public school students.

Age and Gender Differences

Age and gender show some relationship to achievement.

- Eighth grade students who are 16 or older consistently score lower than those who are 15, 14 or younger.

- Students who have been held back at least one grade (who are generally overage for grade) score significantly lower than students who have not been held back (in reading, a mean of 7 vs. 11).

- Male and female students show little practical difference in performance in mathematics, science or history/government. Females perform significantly and practically better than males in reading (mean of 11 vs. 9.6).

Racial/Ethnic Differences

As found in previous research, there are relatively large mean differences on all tests in favor of the white majority group compared to black and Hispanic minorities.

- Only about a quarter of Hispanics and blacks demonstrate mathematics proficiency at the intermediate level or above (knowledge of decimals, fractions and percents), compared with 47 percent of whites.

- Asian students are far more likely than students of any other ethnic group to show proficiency at the advanced level in mathematics (Asians: 34 percent, whites: 22 percent; Hispanics: 9 percent; black: 5 percent, and American Indian: 5 percent). This is true regardless of socioeconomic status level.

Socioeconomic Status Differences

Socioeconomic status was computed for each student. Large group differences are seen when students are grouped into quartiles based on socioeconomic status (SES).

- There are large differences in tested performance in all content areas (math, science, reading, and history/government) in favor of students from high SES families compared to those from families characterized by low socioeconomic status.

- When socioeconomic status is taken into account, average white majority-minority group differences in mathematics and reading are reduced by about 25-30 percent for blacks, Hispanics and American Indians.

- Students in the top 25 percent of socioeconomic status are eight times as likely as those in the bottom 25 percent to show proficiency at the advanced mathematics level (39 percent vs. 5 percent).

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INTRODUCTION

This set of tables examines the test achievement of a national probability sample of eighth graders in public and private schools. Statistics were obtained from the base year student survey of the National Education Longitudinal Study of 1988 (NELS:88). The NELS:88 study is the latest longitudinal study sponsored by the National Center for Education Statistics (NCES), and is designed to monitor the transition of a national sample of young adults as they progress from junior to senior high and then on to post-secondary education and/or the world of work. The primary purpose of the NELS:88 longitudinal study is to provide policy relevant information on the effectiveness of schools, curriculum paths, special programs, variations in curriculum content, and/or mode of delivery in bringing about educational growth.

Among the more important educational indicators that will be monitored at the 8th, 10th, and 12th grade is the achievement test battery. The NELS test battery is composed of four separate tests - Reading Comprehension, Mathematics, Science, and History/Citizenship/Government. The NELS:88 test battery is critical to the measurement of growth in educational achievement that will take place during the last four years of secondary schooling.

This report consists of a tabular summary of the achievement test scores based on the NELS:88 base year sample of approximately 25,000 eighth graders who were sampled from slightly more than 1,000 schools. Test scores were tabulated by selected variables that have been shown to be related to achieving the skills and knowledge necessary to become a productive member of society.

In addition to presenting mean test scores, the reading and mathematics tables also show the percentage of the group scoring at each proficiency level described above, and the standard error of the percentage estimate.

The effect size shows the mean difference in terms of standard deviation units. The use of effect size contrasts (which are not tested for statistical significance) in addition to the usual means allows one to compare mean differences between groups on different tests when the tests are on different scales. While many contrasts may be statistically significant given large sample sizes, only a few many be practically significant. Effect sizes below .3 of a standard deviation are considered small and only approaching practical significance. See the Technical Notes for a detailed discussion of use of effect sizes in comparing group differences.

Technical notes concerning the survey design, response rates, variables used in the tables, significance testing, and methods for estimating standard errors and effect sizes follow the tables.

It should be noted that the estimates presented here are based on a preliminary data file which differs slightly from the public use tape. Some revisions were made in categorizing several background variables. All comparisons cited (**t** tests) in the text were done using student's **t** tests with Bonferroni adjustments to multiple comparisons. Unless otherwise noted, all comparisons are significant at the .05 level.

Table 1-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level reading test, by student sex, race/ethnicity, SES and birth year

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
SEX														
Male	11755	1502566	9.63	6.08	0.13	0.00	11235	1432457	15.63	0.75	52.21	1.03	32.16	0.97
Female	11887	1498169	11.00	5.93	0.12	0.23	11439	1440465	11.93	0.67	52.47	1.03	35.60	0.98
RACE/ETHNICITY														
Asian	1500	105571	10.78	6.25	0.36	0.84	1431	100123	14.84	2.06	47.30	2.89	37.86	2.81
Chinese	302	17811	11.48	6.40	0.82	0.96	288	17029	13.84	4.45	43.93	6.40	42.24	6.37
Filipino	285	21117	10.90	5.88	0.78	0.86	275	20198	13.98	4.60	53.62	6.62	32.40	6.21
Japanese	87	5789	11.71	6.05	1.45	1.00	84	5529	11.09	7.54	42.02	11.85	46.89	11.98
Korean	185	11374	13.14	5.79	0.95	1.23	178	10964	7.08	4.23	39.81	8.06	53.10	8.22
Southeast Asian	235	13003	9.73	5.89	0.86	0.67	227	12536	17.30	5.53	47.41	7.30	35.30	6.98
Pacific Islander	102	9553	5.69	4.95	1.10	0.00	90	8267	34.46	10.54	54.33	11.05	11.21	7.00
South Asian	123	8911	13.52	5.77	1.17	1.30	118	8599	3.76	3.84	43.90	10.02	52.34	10.09
West Asian	31	3128	12.35	5.03	2.02	1.10	30	3094	8.46	11.20	38.86	19.61	52.68	20.09
Middle Eastern	42	3949	11.18	6.23	2.15	0.91	40	3883	21.06	14.09	48.56	17.27	30.38	15.90
Other Asian	85	8253	10.26	6.04	1.47	0.76	81	7685	13.24	8.23	50.85	12.15	35.91	11.66
Hispanic	3005	304916	7.82	5.47	0.22	0.35	2847	285892	21.18	1.67	58.37	2.01	20.45	1.65
Mexican, Chicano	1825	184720	7.59	5.18	0.27	0.31	1741	174786	20.19	2.10	62.03	2.54	17.78	2.00
Cuban	124	11067	9.04	6.42	1.29	0.55	119	10661	20.53	8.13	49.20	10.06	30.27	9.24
Puerto Rican	353	33870	7.62	5.60	0.67	0.32	331	30875	24.46	5.12	53.39	5.95	22.15	4.95
Other Hispanic	660	70123	8.46	5.85	0.51	0.46	618	65312	21.88	3.60	52.55	4.35	25.57	3.80
Black, non-Hispanic	2858	390195	7.05	5.33	0.22	0.23	2656	362018	23.61	1.78	58.08	2.07	18.31	1.62
White, non-Hispanic	15756	2127606	11.36	5.89	0.11	0.94	15249	2057571	10.44	0.55	50.73	0.89	38.83	0.87
American Indian, Alaskan	308	43293	6.93	5.24	0.67	0.20	292	41072	27.45	5.70	57.24	6.31	15.32	4.60
SES														
Low quartile	5627	742779	7.17	5.26	0.16	0.00	5324	701106	22.79	1.25	59.79	1.46	17.41	1.13
Second quartile	5556	752323	9.53	5.75	0.17	0.39	5317	721103	14.88	1.07	56.57	1.49	28.56	1.36
Third quartile	5642	753621	10.99	5.78	0.17	0.63	5413	722629	11.84	0.96	52.06	1.49	36.10	1.43
High quartile	6809	751143	13.53	5.56	0.15	1.05	6612	727214	5.90	0.64	41.22	1.34	52.88	1.36
BIRTH YEAR														
1972 or before	1255	172268	5.40	4.54	0.29	0.00	1175	161109	30.68	2.92	58.52	3.12	10.80	1.96
1973	6910	896398	9.02	6.03	0.16	0.60	6591	853537	19.02	1.06	53.28	1.34	27.70	1.21
1974 or later	15131	1889253	11.41	5.82	0.11	0.99	14585	1818272	9.70	0.54	51.36	0.91	38.94	0.89

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey

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Table 1-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test by student sex, race/ethnicity, SES and birth year

	Sample	Weighted	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
	n	n	Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
SEX																
Male	11750	1500936	16.03	11.49	0.24	0.01	10843	1383120	20.38	0.83	37.46	1.00	22.75	0.87	19.42	0.82
Female	11878	1497059	15.86	11.15	0.23	0.00	11059	1393064	17.29	0.78	42.92	1.02	21.54	0.84	18.25	0.79
RACE/ETHNICITY																
Asian	1495	105178	19.86	12.21	0.71	0.97	1388	97401	13.35	1.97	30.73	2.67	21.21	2.37	34.71	2.76
Chinese	302	17811	23.64	11.84	1.53	1.31	281	16767	11.83	4.16	22.39	5.37	19.68	5.12	46.11	6.43
Filipino	283	21070	17.74	11.74	1.56	0.78	257	19121	14.62	4.70	37.71	6.45	23.54	5.65	24.12	5.70
Japanese	86	5614	23.34	11.23	2.71	1.28	82	5422	9.86	7.20	17.53	9.18	22.83	10.14	49.77	12.08
Korean	185	11374	25.55	10.27	1.69	1.48	175	10702	5.11	3.63	21.39	6.75	19.51	6.53	53.98	8.21
Southeast Asian	235	13003	19.08	11.27	1.65	0.90	225	12464	12.95	4.91	31.22	6.77	26.18	6.42	29.65	6.67
Pacific Islander	101	9545	10.19	9.74	2.17	0.12	88	7941	34.36	10.59	44.44	11.08	12.86	7.46	8.33	6.16
South Asian	123	8911	23.54	12.24	2.47	1.30	116	8652	5.78	4.71	25.93	8.85	24.26	8.66	44.03	10.03
West Asian	31	3128	23.46	11.74	4.72	1.29	31	3127	5.05	8.81	28.61	18.18	21.99	16.66	44.36	19.99
Middle Eastern	42	3949	20.06	11.87	4.10	0.99	37	3645	6.42	8.47	39.99	16.93	15.86	12.63	37.73	16.75
Other Asian	84	8091	17.40	11.23	2.74	0.76	77	7410	14.94	8.71	38.91	11.92	19.86	9.75	26.28	10.76
Hispanic	2996	303775	10.99	9.87	0.40	0.19	2765	280205	27.62	1.83	46.84	2.04	16.86	1.53	8.68	1.15
Mexican, Chicano	1817	183745	10.67	9.36	0.49	0.16	1701	170892	28.47	2.37	48.89	2.63	15.27	1.89	7.38	1.37
Cuban	124	11067	13.30	11.90	2.39	0.39	116	10257	23.97	8.59	37.92	9.76	19.35	7.95	18.76	7.85
Puerto Rican	358	34417	9.47	9.71	1.15	0.05	323	31154	29.54	5.40	48.12	5.92	15.96	4.34	6.38	2.89
Other Hispanic	655	69535	12.38	10.63	0.93	0.31	586	63319	23.58	3.72	42.86	4.33	22.19	3.64	11.38	2.78
Black, non-Hispanic	2860	390022	8.85	9.06	0.38	0.00	2644	359294	28.87	1.90	49.40	2.09	16.48	1.55	5.25	0.93
White, non-Hispanic	15753	2126281	17.99	11.05	0.20	0.81	14622	1972993	15.45	0.65	37.88	0.87	24.28	0.77	22.40	0.74
American Indian, Alaskan	307	43183	9.40	9.03	1.15	0.05	281	39681	32.32	5.98	49.83	6.39	13.03	4.30	4.82	2.74
SES																
Low quartile	5619	741460	9.65	9.14	0.27	0.00	5227	688381	29.61	1.36	48.75	1.49	16.27	1.10	5.37	0.67
Second quartile	5552	751560	14.08	10.36	0.31	0.39	5132	693537	21.56	1.24	44.48	1.49	22.35	1.25	11.62	0.96
Third quartile	5639	753008	17.11	10.70	0.32	0.66	5215	697056	15.19	1.07	41.44	1.47	23.86	1.27	19.51	1.18
High quartile	6810	751098	22.87	10.71	0.29	1.17	6320	696341	9.07	0.78	26.26	1.19	26.01	1.19	38.65	1.32
BIRTH YEAR																
1972 or before	1252	172104	6.40	7.54	0.48	0.00	1163	159817	38.57	3.08	49.46	3.17	10.05	1.90	1.92	0.87
1973	6908	895479	13.35	11.05	0.30	0.61	6379	826265	24.31	1.16	42.24	1.33	19.98	1.08	13.47	0.92
1974 or later	15121	1887598	18.12	11.01	0.20	1.04	14040	1750856	14.31	0.64	38.34	0.89	24.28	0.78	23.07	0.77

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 1-c--Test score statistics of eighth graders, science test, by student sex, race/ethnicity, SES and birth year

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
SEX						
Male	11750	1499026	10.25	5.99	0.12	0.13
Female	11865	1493995	9.50	5.39	0.11	0.00
RACE/ETHNICITY						
Asian	1493	105058	10.61	6.02	0.35	0.77
Chinese	301	17744	11.54	6.26	0.81	0.93
Filipino	281	20826	10.26	5.77	0.77	0.71
Japanese	87	5789	12.51	5.73	1.38	1.10
Korean	184	11329	13.22	5.53	0.91	1.23
Southeast Asian	235	13003	9.97	5.37	0.79	0.66
Pacific Islander	102	9603	6.22	4.79	1.06	0.00
South Asian	123	8911	11.84	5.80	1.17	0.98
West Asian	31	3128	11.36	6.75	2.71	0.90
Middle Eastern	42	3949	10.06	6.84	2.36	0.67
Other Asian	84	8091	11.08	5.00	1.22	0.85
Hispanic	2995	303294	7.50	4.95	0.20	0.22
Mexican, Chicano	1826	184779	7.41	4.80	0.25	0.21
Cuban	118	10498	8.08	6.03	1.24	0.33
Puerto Rican	355	33799	6.94	4.85	0.58	0.13
Other Hispanic	653	69082	8.00	5.11	0.45	0.31
Black, non-Hispanic	2845	384802	6.27	4.47	0.19	0.01
White, non-Hispanic	15758	2127230	10.94	5.60	0.10	0.83
American Indian, Alaskan	307	43183	6.47	4.89	0.63	0.04
SES						
Low quartile	5621	741757	6.97	4.85	0.14	0.00
Second quartile	5553	750729	9.09	5.36	0.16	0.37
Third quartile	5636	751803	10.51	5.44	0.16	0.62
High quartile	6797	747865	12.89	5.48	0.15	1.04
BIRTH YEAR						
1972 or before	1254	172722	5.98	4.55	0.29	0.00
1973	6905	894642	8.96	5.77	0.16	0.52
1974 or later	15109	1882888	10.70	5.56	0.10	0.83

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 1-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by student sex, race/ethnicity, SES and birth year

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
SEX						
Male	11692	1494006	15.42	7.90	0.16	0.08
Female	11832	1488898	14.80	7.28	0.15	0.00
RACE/ETHNICITY						
Asian	1487	104644	16.08	8.22	0.48	0.81
Chinese	301	17744	17.32	8.61	1.11	0.97
Filipino	283	21124	16.00	7.77	1.04	0.80
Japanese	87	5789	16.57	7.42	1.78	0.87
Korean	182	11134	19.39	7.09	1.18	1.24
Southeast Asian	234	12972	14.92	8.68	1.27	0.66
Pacific Islander	100	9404	9.93	7.07	1.58	0.00
South Asian	122	8875	19.27	7.30	1.48	1.23
West Asian	30	3002	17.69	8.06	3.30	1.02
Middle Eastern	41	3824	16.24	6.05	2.12	0.83
Other Asian	84	8091	15.74	7.63	1.86	0.76
Hispanic	2981	301369	11.65	7.70	0.32	0.23
Mexican, Chicano	1822	184378	11.27	7.52	0.39	0.18
Cuban	117	10429	13.71	7.99	1.66	0.50
Puerto Rican	351	33026	11.40	7.64	0.91	0.19
Other Hispanic	648	68400	12.68	7.92	0.70	0.36
Black, non-Hispanic	2842	384410	11.19	6.78	0.29	0.16
White, non-Hispanic	15693	2120300	16.41	7.24	0.13	0.85
American Indian, Alaskan	308	43293	10.48	7.16	0.91	0.07
SES						
Low quartile	5609	739983	10.99	7.10	0.21	0.00
Second quartile	5526	747748	14.05	7.16	0.22	0.40
Third quartile	5612	749277	16.15	6.96	0.21	0.68
High quartile	6769	745028	19.22	6.71	0.18	1.08
BIRTH YEAR						
1972 or before	1249	171871	9.53	6.65	0.42	0.00
1973	6895	893295	13.74	7.79	0.21	0.55
1974 or later	15036	1875184	16.31	7.24	0.13	0.89

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 2-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by SES controlled for race/ethnicity

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
LOW SES QUARTILE BY RACE/ETHNICITY														
Asian	282	20753	7.30	5.82	0.78	0.29	264	19556	26.55	5.89	52.48	6.66	20.97	5.43
Hispanic	1463	148607	6.44	4.83	0.28	0.15	1380	138891	26.60	2.59	59.49	2.87	13.91	2.03
Black, non-Hispanic	1167	165543	5.54	4.59	0.30	0.00	1078	152049	29.62	2.99	58.80	3.23	11.58	2.10
White, non-Hispanic	2526	379546	8.26	5.42	0.24	0.45	2426	364679	17.16	1.68	61.28	2.17	21.57	1.83
American Indian, Alaskan	118	17814	6.09	4.77	0.98	0.09	110	16541	33.37	9.72	58.48	10.16	8.15	5.64
MIDDLE TWO SES QUARTILES BY RACE/ETHNICITY														
Asian	645	47472	9.78	5.77	0.51	0.41	617	44955	17.44	3.35	52.43	4.40	30.13	4.05
Hispanic	1206	124409	8.56	5.51	0.36	0.20	1136	116097	17.28	2.44	59.02	3.17	23.71	2.74
Black, non-Hispanic	1328	183736	7.68	5.31	0.33	0.06	1236	171363	20.37	2.48	58.37	3.03	21.26	2.52
White, non-Hispanic	7764	1114329	10.99	5.73	0.15	0.61	7504	1077928	11.28	0.80	53.21	1.27	35.51	1.22
American Indian, Alaskan	150	20856	7.33	5.19	0.95	0.00	143	20025	22.86	7.68	58.07	9.02	19.07	7.18
HIGH SES QUARTILE BY RACE/ETHNICITY														
Asian	572	37304	13.98	5.56	0.52	0.93	549	35569	5.14	2.07	37.91	4.54	56.95	4.64
Hispanic	334	31617	11.44	5.91	0.72	0.51	329	30620	11.34	3.89	50.68	6.13	37.99	5.95
Black, non-Hispanic	359	40447	10.41	6.11	0.72	0.34	338	38136	14.10	4.11	53.82	5.89	32.07	5.52
White, non-Hispanic	5466	633732	13.85	5.39	0.16	0.90	5319	614963	4.99	0.66	40.13	1.49	54.89	1.51
American Indian, Alaskan	40	4623	8.38	6.51	2.31	0.00	39	4505	26.09	15.55	48.97	17.70	24.94	15.32

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 2-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by SES controlled for race/ethnicity

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level								
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
LOW SES QUARTILE BY RACE/ETHNICITY																
Asian	280	20562	13.41	11.52	1.54	0.61	258	18463	27.57	5.98	38.26	6.51	15.72	4.87	18.45	5.19
Hispanic	1459	147995	8.60	8.47	0.50	0.18	1356	137407	32.84	2.75	49.34	2.93	13.54	2.01	4.27	1.19
Black, Non-Hispanic	1167	165470	6.54	7.50	0.49	0.00	1090	153427	33.42	3.09	51.30	3.28	12.99	2.20	2.29	0.98
White, Non-Hispanic	2523	378883	11.46	9.52	0.42	0.43	2351	353109	25.75	1.95	48.10	2.23	19.39	1.76	6.77	1.12
American Indian, Alaskan	118	17814	7.03	6.98	1.44	0.04	106	16216	41.39	10.16	48.39	10.31	8.52	5.76	1.70	2.66
MIDDLE TWO SES QUARTILES BY RACE/ETHNICITY																
Asian	642	47270	17.81	11.35	1.00	0.73	587	43482	12.99	2.97	39.54	4.32	21.44	3.63	26.03	3.88
Hispanic	1201	123880	12.13	10.08	0.65	0.23	1104	113157	24.82	2.79	46.61	3.22	18.85	2.53	9.72	1.91
Black, Non-Hispanic	1332	183955	9.53	9.06	0.56	0.00	1226	169137	26.55	2.71	50.88	3.07	18.00	2.36	4.58	1.28
White, Non-Hispanic	7763	1113693	17.06	10.42	0.27	0.67	7196	1032720	16.08	0.93	41.27	1.25	24.80	1.10	17.85	0.97
American Indian, Alaskan	149	20746	10.49	9.42	1.73	0.08	137	18956	27.94	8.23	52.02	9.17	14.43	6.45	5.62	4.23
HIGH SES QUARTILE BY RACE/ETHNICITY																
Asian	572	37304	26.02	10.86	1.02	1.10	542	35412	6.40	2.29	15.89	3.42	23.81	3.99	53.90	4.67
Hispanic	334	31617	17.76	11.11	1.36	0.37	303	29358	13.95	4.25	36.48	5.90	24.17	5.25	25.39	5.33
Black, Non-Hispanic	357	40129	15.38	11.03	1.31	0.16	324	36260	20.14	4.75	34.70	5.64	24.21	5.08	20.95	4.82
White, Non-Hispanic	5467	633705	23.51	10.33	0.31	0.87	5075	587164	8.15	0.83	25.77	1.32	26.30	1.33	39.79	1.48
American Indian, Alaskan	40	4623	13.62	11.47	4.06	0.00	38	4508	18.10	13.64	45.83	17.65	23.36	14.99	12.71	11.80

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 2-c--Test score statistics of 1988 eighth graders, science test, by SES controlled for race/ethnicity

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
LOW SES QUARTILE BY RACE/ETHNICITY						
Asian	282	20753	7.72	5.23	0.70	0.47
Hispanic	1461	148419	6.43	4.48	0.26	0.24
Black, non-Hispanic	1162	164529	5.28	3.91	0.26	0.04
White, non-Hispanic	2527	379725	8.02	5.09	0.23	0.52
American Indian, Alaskan	118	17814	5.04	4.12	0.85	0.00
MIDDLE TWO SES QUARTILES BY RACE/ETHNICITY						
Asian	639	46971	9.75	5.74	0.51	0.56
Hispanic	1200	123177	8.06	5.01	0.32	0.27
Black, non-Hispanic	1328	181953	6.54	4.47	0.27	0.00
White, non-Hispanic	7768	1114542	10.61	5.36	0.14	0.71
American Indian, Alaskan	149	20746	7.21	5.02	0.92	0.12
HIGH SES QUARTILE BY RACE/ETHNICITY						
Asian	571	37291	13.31	5.70	0.53	0.82
Hispanic	332	31416	10.31	5.37	0.66	0.29
Black, non-Hispanic	351	37851	9.32	5.20	0.62	0.12
White, non-Hispanic	5463	632964	13.26	5.36	0.16	0.81
American Indian, Alaskan	40	4623	8.63	5.46	1.93	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 2-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by SES controlled for race/ethnicity

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
LOW SES QUARTILE BY RACE/ETHNICITY						
Asian	279	20527	11.35	8.17	1.10	0.34
Hispanic	1455	147531	9.78	7.28	0.43	0.14
Black, non-Hispanic	1162	164336	9.38	6.17	0.41	0.08
White, non-Hispanic	2525	379463	12.32	7.09	0.32	0.47
American Indian, Alaskan	118	17814	8.74	6.93	1.43	0.00
MIDDLE TWO SES QUARTILES BY RACE/ETHNICITY						
Asian	636	46765	14.94	7.81	0.69	0.45
Hispanic	1192	122139	12.67	7.55	0.49	0.15
Black, non-Hispanic	1326	181880	11.92	6.67	0.41	0.05
White, non-Hispanic	7731	1110573	16.01	6.89	0.18	0.59
American Indian, Alaskan	150	20856	11.56	6.86	1.25	0.00
HIGH SES QUARTILE BY RACE/ETHNICITY						
Asian	571	37310	20.10	6.78	0.64	1.02
Hispanic	332	31416	16.49	7.34	0.90	0.55
Black, non-Hispanic	350	37726	15.59	7.20	0.86	0.43
White, non-Hispanic	5437	630265	19.59	6.49	0.20	0.95
American Indian, Alaskan	40	4623	12.34	7.93	2.81	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 3-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by family demographic characteristics

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
PARENTS LIVING IN HOUSEHOLD														
Father/Male Guardian only	641	82986	9.45	6.25	0.55	0.31	616	79801	17.82	3.39	54.73	4.40	27.45	3.95
Mother/Female Guardian only	3838	495770	9.12	5.96	0.22	0.25	3645	470968	17.84	1.38	53.71	1.80	28.45	1.63
Both	18464	2334927	10.68	6.00	0.10	0.51	17757	2240847	12.41	0.54	51.94	0.82	35.65	0.79
Neither	439	57964	7.60	5.77	0.62	0.00	415	54576	24.38	4.59	54.50	5.32	21.12	4.36
NUMBER OF BROTHERS AND SISTERS														
None	1561	188739	11.35	6.13	0.35	0.38	1495	179806	12.12	1.85	49.43	2.83	38.45	2.76
1	7410	933837	11.31	6.00	0.16	0.37	7135	899325	11.50	0.83	49.15	1.30	39.35	1.27
2	6224	798689	10.63	5.91	0.17	0.26	5980	764765	12.25	0.93	53.04	1.42	34.71	1.35
More than 2	8303	1060383	9.08	5.94	0.15	0.00	7931	1011834	16.99	0.92	55.28	1.22	27.73	1.10
PARENT EDUCATION (HIGHER OF MOTHER, FATHER)														
Did not finish high school	2390	307571	6.47	5.07	0.23	0.00	2248	288142	25.63	2.00	59.37	2.25	15.01	1.64
High school grad or ged	4407	614987	8.81	5.65	0.19	0.39	4218	588268	17.37	1.28	57.91	1.67	24.72	1.46
More than high school	9273	1247943	10.18	5.77	0.13	0.61	8882	1195269	13.18	0.79	55.32	1.16	31.50	1.08
College graduate	3528	419419	12.59	5.80	0.22	1.01	3400	404031	8.33	1.04	44.12	1.87	47.54	1.88
M.A. Or equavalent	2186	243524	14.16	5.35	0.26	1.27	2134	238273	5.04	1.05	37.95	2.32	57.01	2.37
Ph.D., M.D., Other	1391	120194	14.58	5.49	0.33	1.34	1352	114932	4.42	1.23	34.65	2.86	60.93	2.93
Don't know	441	43929	7.82	5.89	0.63	0.22	418	41364	25.33	4.64	50.40	5.33	24.27	4.57
HOME HAS A SPECIFIC PLACE FOR STUDY														
Have	9752	1187884	10.12	6.07	0.14	0.00	9352	1137110	14.71	0.80	51.91	1.13	33.38	1.07
Do not have	13161	1715619	10.63	5.97	0.12	0.08	12640	1646525	12.36	0.64	52.77	0.97	34.88	0.93
HOME HAS NEWSPAPER, MAGAZINES, BOOKS, ENCYCL.														
None of these	449	54654	6.10	5.06	0.53	0.00	416	50648	31.26	4.90	56.69	5.24	12.05	3.44
One or two of these	4933	630812	8.30	5.71	0.18	0.36	4670	596543	19.50	1.26	57.24	1.58	23.26	1.35
More than two of these	17961	2273842	11.07	5.95	0.10	0.82	17308	2188079	11.37	0.53	51.01	0.84	37.62	0.81

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 3-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by family demographic characteristics

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
PARENTS LIVING IN HOUSEHOLD																
Father/Male Guardian only	637	82340	14.37	11.27	1.00	0.42	582	74885	25.83	3.88	36.55	4.27	23.38	3.76	14.24	3.10
Mother/Female Guardian only	3837	495671	13.29	10.93	0.40	0.32	3545	456752	23.20	1.53	44.14	1.80	19.59	1.44	13.07	1.22
Both	18456	2333140	16.76	11.30	0.19	0.63	17138	2166027	17.26	0.62	39.39	0.81	22.78	0.69	20.57	0.67
Neither	440	58080	9.64	9.38	1.00	0.00	405	53220	29.89	4.89	46.70	5.33	17.23	4.03	6.18	2.57
NUMBER OF BROTHERS AND SISTERS																
None	1560	188842	16.97	11.26	0.64	0.29	1451	175958	18.39	2.20	36.86	2.74	24.36	2.43	20.39	2.29
1	7408	932959	17.79	11.33	0.29	0.36	6885	864910	15.67	0.95	37.41	1.26	23.75	1.11	23.16	1.10
2	6226	798755	16.65	11.29	0.32	0.26	5775	738925	17.05	1.07	40.38	1.39	21.92	1.17	20.66	1.15
More than 2	8293	1058814	13.74	10.95	0.27	0.00	7665	980133	22.76	1.03	43.07	1.22	20.60	0.99	13.57	0.84
PARENT EDUCATION (HIGHER OF MOTHER, FATHER)																
Did not finish high school	2391	307429	8.50	8.73	0.40	0.00	2244	287296	33.16	2.16	47.98	2.29	14.43	1.61	4.44	0.94
High school grad or ged	4401	613899	12.83	10.13	0.34	0.38	4057	565178	24.26	1.45	46.17	1.68	20.07	1.35	9.49	0.99
More than high school	9268	1247201	15.34	10.63	0.25	0.60	8587	1154254	18.18	0.90	43.75	1.15	22.98	0.98	15.09	0.83
College graduate	3524	419003	20.93	10.71	0.40	1.10	3263	386782	10.67	1.17	31.25	1.75	27.05	1.68	31.03	1.75
M.A. Or equavalent	2188	243472	24.03	10.73	0.51	1.37	2026	227148	7.50	1.26	22.36	2.00	26.45	2.11	43.70	2.38
Ph.D., M.D., Other	1391	120194	25.46	10.61	0.64	1.50	1308	113275	7.92	1.62	20.16	2.41	20.74	2.44	51.17	3.00
Don't know	441	43835	10.99	10.87	1.16	0.22	395	39767	30.24	4.90	42.28	5.27	15.39	3.85	12.08	3.48
HOME HAS A SPECIFIC PLACE FOR STUDY																
Have	9736	1184973	15.79	11.42	0.26	0.00	9030	1099239	19.28	0.90	39.48	1.11	22.05	0.94	19.18	0.89
Do not have	13167	1716683	16.43	11.18	0.22	0.06	12212	1589739	17.51	0.74	40.74	0.96	22.54	0.82	19.21	0.77
HOME HAS NEWSPAPER, MAGAZINES, BOOKS, ENCYCL.																
None of these	447	54424	8.95	9.24	0.98	0.00	412	50348	35.27	5.06	44.37	5.26	12.93	3.56	7.43	2.78
One or two of these	4935	631322	12.02	10.37	0.33	0.27	4590	587404	25.46	1.39	46.13	1.59	18.73	1.24	9.68	0.94
More than two of these	17951	2271624	17.37	11.26	0.19	0.74	16635	2102174	16.09	0.61	38.52	0.81	23.45	0.71	21.94	0.69

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 3-c--Test score statistics of 1988 eighth graders, science test, by family demographic characteristics

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
PARENTS LIVING IN HOUSEHOLD						
Father/Male Guardian only	638	82583	9.23	5.90	0.52	0.40
Mother/Female Guardian only	3830	492672	8.65	5.45	0.20	0.30
Both	18446	2330605	10.25	5.71	0.09	0.58
Neither	441	58198	6.95	4.94	0.53	0.00
NUMBER OF BROTHERS AND SISTERS						
None	1561	188629	10.52	5.66	0.32	0.31
1	7403	932696	10.81	5.73	0.15	0.36
2	6221	796996	10.21	5.60	0.16	0.26
More than 2	8288	1055978	8.73	5.57	0.14	0.00
PARENT EDUCATION (HIGHER OF MOTHER, FATHER)						
Did not finish high school	2390	307320	6.30	4.70	0.22	0.00
High school grad or ged	4403	613999	8.46	5.26	0.18	0.38
More than high school	9265	1245209	9.74	5.40	0.13	0.60
College graduate	3520	418310	12.03	5.53	0.21	1.00
M.A. Or equavalent	2181	241279	13.50	5.40	0.26	1.26
Ph.D., M.D., Other	1389	119774	13.86	5.62	0.34	1.33
Don't know	441	43961	7.32	5.27	0.56	0.18
HOME HAS A SPECIFIC PLACE FOR STUDY						
Have	9736	1183776	9.77	5.72	0.13	0.00
Do not have	13153	1712850	10.11	5.66	0.11	0.06
HOME HAS NEWSPAPER, MAGAZINES, BOOKS, ENCYCL.						
None of these	444	53842	6.15	4.26	0.45	0.00
One or two of these	4934	630706	7.99	5.29	0.17	0.32
More than two of these	17939	2267336	10.57	5.67	0.09	0.77

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 3-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by family demographic characteristics

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
PARENTS LIVING IN HOUSEHOLD						
Father/Male Guardian only	635	82188	14.36	7.80	0.69	0.34
Mother/Female Guardian only	3811	489794	13.49	7.48	0.27	0.23
Both	18381	2324442	15.58	7.55	0.12	0.50
Neither	441	58198	11.75	7.39	0.79	0.00
NUMBER OF BROTHERS AND SISTERS						
None	1558	188282	16.33	7.38	0.42	0.37
1	7378	929670	16.24	7.51	0.20	0.36
2	6196	793534	15.70	7.33	0.21	0.28
More than 2	8249	1052595	13.53	7.63	0.19	0.00
PARENT EDUCATION (HIGHER OF MOTHER, FATHER)						
Did not finish high school	2387	306509	10.02	7.05	0.32	0.00
High school grad or ged	4387	612360	13.21	7.20	0.24	0.42
More than high school	9228	1241297	14.96	7.15	0.17	0.65
College graduate	3506	416714	18.11	6.93	0.26	1.07
M.A. Or equavalent	2167	240147	20.15	6.45	0.31	1.33
Ph.D., M.D., Other	1386	119373	20.34	6.55	0.39	1.36
Don't know	437	43335	11.36	7.88	0.84	0.18
HOME HAS A SPECIFIC PLACE FOR STUDY						
Have	9694	1179842	15.11	7.63	0.17	0.00
Do not have	13105	1707027	15.32	7.51	0.15	0.03
HOME HAS NEWSPAPER, MAGAZINES, BOOKS, ENCYCL.						
None of these	440	53465	9.76	6.66	0.71	0.00
One or two of these	4920	628871	12.57	7.58	0.24	0.37
More than two of these	17869	2260085	16.06	7.36	0.12	0.83

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 4-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by student language use

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
SPEAK OTHER LANGUAGE BEFORE STARTING SCHOOL														
Yes	3789	369795	8.58	6.04	0.22	0.00	3588	347799	21.51	1.50	51.82	1.82	26.66	1.61
No	19718	2613334	10.58	6.00	0.10	0.33	18959	2508796	12.58	0.53	52.46	0.80	34.96	0.76
LANGUAGE YOU USUALLY SPEAK NOW														
English	22454	2863118	10.48	6.03	0.09	0.84	21562	2745844	13.20	0.51	52.18	0.75	34.63	0.71
Spanish	297	41302	5.38	4.62	0.60	0.00	272	36679	32.71	6.10	57.49	6.43	9.80	3.86
Other language	228	19421	7.20	5.85	0.87	0.30	218	18666	30.08	6.80	52.66	7.41	17.26	5.61
LANGUAGE SPOKEN IN THE HOME														
Non-English only	948	98502	8.11	5.48	0.40	0.03	900	92228	20.83	2.95	57.16	3.60	22.01	3.01
Non-English dominant	1397	130497	7.92	5.72	0.34	0.00	1326	123243	22.61	2.51	55.13	2.98	22.26	2.49
English only	18450	2492590	10.52	6.03	0.10	0.43	17734	2391883	12.99	0.55	52.09	0.82	34.92	0.79
English dominant	2531	252018	10.70	6.06	0.27	0.46	2424	241397	12.76	1.49	51.83	2.22	35.41	2.13
ENGLISH PROFICIENCY														
Limited English proficiency	322	29619	4.47	4.39	0.55	0.00	305	27192	42.74	6.18	50.53	6.24	6.73	3.13
Language minority	1194	107206	7.58	5.36	0.35	0.51	1129	100787	22.11	2.69	59.11	3.19	18.79	2.53
Not LEP or LM	3072	326773	10.44	5.98	0.24	0.99	2949	313338	13.59	1.38	52.02	2.02	34.39	1.92
ENGLISH PROFICIENCY														
LEP: understands and speaks very well	153	13558	5.86	4.78	0.87	0.45	145	12583	31.31	8.40	58.01	8.94	10.68	5.59
LEP: understands better than speaks	51	4843	3.72	3.68	1.15	0.10	49	4646	42.62	15.51	52.02	15.67	5.36	7.06
LEP: understands same or less than speaks	118	11218	3.12	3.60	0.74	0.00	111	9962	57.23	10.20	40.38	10.12	2.38	3.15
LM: understands and speaks very well	845	73425	8.11	5.52	0.43	0.83	800	68842	17.70	2.94	60.70	3.76	21.61	3.17
LM: understands better than speaks	139	16013	6.86	4.92	0.93	0.62	133	15412	27.18	8.45	58.71	9.35	14.11	6.61
LM: understands same or less than speaks	210	17768	6.02	4.65	0.72	0.48	196	16532	35.75	7.41	52.86	7.72	11.39	4.91
Non-LM: understands and speaks very well	2643	279932	11.04	5.90	0.26	1.31	2545	269912	11.69	1.40	50.69	2.18	37.62	2.11
Non-LM: understands better than speaks	209	22424	7.61	5.04	0.78	0.74	197	21397	22.09	6.43	58.95	7.62	18.96	6.07
Non-LM: understands same/less than speaks	220	24418	6.09	4.97	0.75	0.49	207	22027	28.58	6.82	61.60	7.35	9.83	4.50

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 4-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by student language use

	Sample	Weighted	Test Score Statistics				# With Scores		Percent of Students Performing at each Proficiency Level							
									< Basic		Basic		Intermed		Advanced	
	n	n	Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
SPEAK OTHER LANGUAGE BEFORE STARTING SCHOOL																
Yes	3779	368662	13.73	11.55	0.42	0.00	3480	338389	23.24	1.54	41.22	1.79	17.94	1.40	17.60	1.39
No	19716	2612050	16.29	11.25	0.18	0.23	18301	2422366	18.13	0.61	40.04	0.78	22.75	0.67	19.08	0.63
LANGUAGE YOU USUALLY SPEAK NOW																
English	22447	2861456	16.18	11.32	0.17	0.65	20831	2652930	18.34	0.58	40.10	0.73	22.40	0.62	19.16	0.59
Spanish	296	41089	8.80	8.92	1.16	0.00	276	38295	34.43	6.19	43.00	6.45	14.43	4.58	8.13	3.56
Other language	226	19044	14.20	12.46	1.86	0.48	207	17520	28.86	6.75	30.01	6.83	14.11	5.19	27.02	6.62
LANGUAGE SPOKEN IN THE HOME																
Non-English only	945	98119	13.00	10.61	0.77	0.04	881	91853	25.43	3.17	43.26	3.61	18.16	[illegible]	13.15	2.46
Non-English dominant	1387	129208	12.60	11.19	0.67	0.00	1275	117710	24.67	2.59	42.52	2.97	17.9[illegible]	[illegible]	14.82	2.14
English only	18446	2491170	16.21	11.28	0.19	0.32	17111	2309458	18.29	0.64	40.06	0.81	22.65	0.69	19.00	0.65
English dominant	2533	252312	16.81	11.60	0.52	0.37	2351	232925	17.66	1.70	38.45	2.17	21.47	1.83	22.42	1.86
ENGLISH PROFICIENCY																
Limited English Proficiency	319	29160	7.02	9.08	1.14	0.00	292	26608	39.24	6.12	43.42	6.22	11.43	3.99	5.91	2.96
Language minority	1190	106734	11.85	10.47	0.68	0.43	1108	98116	25.56	2.83	45.39	3.23	17.46	2.47	11.59	2.08
Not LEP or LM	3070	326692	16.37	11.45	0.46	0.83	2848	302028	17.79	1.55	40.00	1.98	21.11	1.65	21.10	1.65
ENGLISH PROFICIENCY																
LEP: understands and speaks very well	151	13272	8.20	9.39	1.71	0.24	144	12838	37.03	8.80	44.14	9.05	14.30	6.38	4.53	3.79
LEP: understands better than speaks	51	4843	5.52	8.37	2.63	0.00	43	4359	55.16	15.60	32.44	14.68	7.27	8.14	5.12	6.92
LEP: understands same or less than speaks	117	11045	6.26	8.82	1.83	0.07	105	9411	34.88	9.87	47.51	10.34	9.43	6.05	8.17	5.67
LM: understands and speaks very well	842	73095	11.93	10.54	0.81	0.57	784	66358	26.84	3.42	44.42	3.84	17.49	2.93	11.25	2.44
LM: understands better than speaks	138	15871	12.01	10.39	1.98	0.57	126	14808	19.60	7.57	48.11	9.53	18.17	7.35	14.12	6.64
LM: understands same or less than speak	210	17768	11.36	10.20	1.58	0.52	198	16948	25.74	6.76	46.83	7.71	16.72	5.77	10.71	4.78
Non-LM: understands and speaks very well	2639	279578	17.13	11.44	0.50	1.03	2453	258736	17.15	1.64	37.52	2.11	22.66	1.83	22.67	1.83
Non-LM: understands better than speaks	210	22491	12.52	10.37	1.60	0.62	193	21092	17.52	5.88	57.33	7.65	12.09	5.04	13.07	5.21
Non-LM: understands same/less than speaks	221	24623	11.15	10.28	1.55	0.50	202	22199	25.50	6.57	52.50	7.52	11.60	4.83	10.40	4.60

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 4-c--Test score statistics of 1988 eighth graders, science test, by student language use

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
SPEAK OTHER LANGUAGE BEFORE STARTING SCHOOL						
Yes	3773	367779	8.32	5.62	0.20	0.00
No	19709	2608076	10.11	5.68	0.09	0.31
LANGUAGE YOU USUALLY SPEAK NOW						
English	22429	2855709	10.00	5.70	0.09	0.62
Spanish	297	41274	6.44	4.10	0.53	0.00
Other language	228	19421	7.20	5.48	0.81	0.13
LANGUAGE SPOKEN IN THE HOME						
Non-English only	943	97961	8.05	5.21	0.38	0.05
Non-English dominant	1387	129245	7.75	5.22	0.31	0.00
English only	18434	2486135	10.05	5.71	0.09	0.40
English dominant	2535	252583	10.22	5.74	0.26	0.43
ENGLISH PROFICIENCY						
Limited English Proficiency	320	29333	5.20	4.20	0.53	0.00
Language minority	1187	106422	7.66	5.05	0.33	0.43
Not LEP or LM	3063	325229	9.95	5.64	0.23	0.83
ENGLISH PROFICIENCY						
LEP: understands and speaks very well	151	13272	5.73	4.63	0.84	0.25
LEP: understands better than speaks	51	4843	5.84	4.01	1.26	0.27
LEP: understands same or less than speaks	118	11218	4.29	3.52	0.73	0.00
LM: understands and speaks very well	841	73031	7.81	5.17	0.40	0.62
LM: understands better than speaks	137	15768	8.09	5.18	0.99	0.67
LM: understands same or less than speaks	209	17623	6.65	4.27	0.66	0.41
Non-LM: understands and speaks very well	2633	278561	10.39	5.63	0.25	1.07
Non-LM: understands better than speaks	210	22491	7.93	5.08	0.79	0.64
Non-LM: understands same/less than speaks	220	24177	6.82	4.80	0.72	0.44

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 4-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by student language use

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
SPEAK OTHER LANGUAGE BEFORE STARTING SCHOOL						
Yes	3737	364698	12.81	8.32	0.30	0.00
No	19653	2600668	15.46	7.43	0.12	0.35
LANGUAGE YOU USUALLY SPEAK NOW						
English	22348	2847195	15.30	7.55	0.11	0.77
Spanish	294	40638	9.41	7.11	0.93	0.00
Other language	226	19270	11.69	7.99	1.19	0.30
LANGUAGE SPOKEN IN THE HOME						
Non-English only	939	97495	12.47	7.53	0.55	0.07
Non-English dominant	1382	128760	11.93	8.20	0.49	0.00
English only	18378	2479132	15.39	7.47	0.12	0.45
English dominant	2510	250869	15.46	7.83	0.35	0.46
ENGLISH PROFICIENCY						
Limited English Proficiency	320	29079	7.13	7.12	0.89	0.00
Language minority	1178	105811	11.57	7.89	0.52	0.58
Not LEP or LM	3038	323190	15.28	7.69	0.31	1.07
ENGLISH PROFICIENCY						
LEP: understands and speaks very well	153	13558	9.80	7.48	1.35	0.71
LEP: understands better than speaks	50	4813	5.73	6.48	2.05	0.18
LEP: understands same or less than speaks	117	10707	4.38	5.52	1.14	0.00
LM: understands and speaks very well	832	72338	12.16	7.84	0.61	1.02
LM: understands better than speaks	137	15768	11.20	8.04	1.54	0.90
LM: understands same or less than speaks	209	17705	9.50	7.58	1.17	0.67
Non-LM: understands and speaks very well	2609	276554	16.00	7.51	0.33	1.53
Non-LM: understands better than speaks	210	22491	12.00	7.32	1.13	1.00
Non-LM: understands same/less than speaks	219	24145	10.05	7.31	1.11	0.75

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table S-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by student attitudes and goals

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
			Mean	SD	SE	EFF	# With Scores		Below Basic		Basic		Advanced	
							SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
LOCUS OF CONTROL														
Low	7688	985704	7.89	5.76	0.15	0.00	7296	933596	22.73	1.07	55.94	1.27	21.33	1.05
Middle	10881	1387796	11.13	5.77	0.12	0.54	10478	1336242	9.74	0.64	53.11	1.07	37.15	1.04
High	4944	605599	12.55	5.72	0.18	0.77	4782	583594	7.78	0.85	45.28	1.59	46.94	1.59
SELF CONCEPT														
Low	9461	1217967	10.01	6.06	0.14	0.00	9079	1167986	15.30	0.83	53.63	1.15	31.06	1.07
Middle	7810	988876	10.43	5.97	0.15	0.07	7484	946078	12.74	0.85	52.33	1.27	34.93	1.21
High	6265	775808	10.74	6.06	0.17	0.12	6015	742620	12.06	0.92	50.60	1.41	37.34	1.37
STUDENT'S POST SECONDARY PLANS														
Won't finish high school	322	43696	4.64	4.83	0.60	0.00	297	40035	37.02	6.03	50.38	6.24	12.60	4.14
High school only	2212	313857	6.45	4.96	0.24	0.30	2094	296906	25.07	2.06	61.66	2.32	13.27	1.62
Vocational, trade, business school	2022	278967	7.92	5.41	0.27	0.54	1936	266258	20.71	2.02	58.86	2.45	20.43	2.01
Attend college	2957	388596	8.36	5.41	0.22	0.61	2803	366637	18.39	1.60	60.34	2.02	21.27	1.69
Graduate from college	9897	1270987	11.25	5.66	0.13	1.09	9526	1225039	9.89	0.67	52.16	1.12	37.95	1.09
Higher level after college	6094	678336	13.01	5.96	0.17	1.38	5897	655453	8.11	0.78	41.80	1.42	50.09	1.43
EXPECTED HIGH SCHOOL PROGRAM														
Academic/college prep	7033	855030	13.14	5.67	0.15	0.71	6798	825997	6.67	0.67	42.32	1.32	51.01	1.34
Vocational, technical, business	4009	527959	8.82	5.49	0.19	0.00	3847	506393	16.22	1.30	59.94	1.73	23.84	1.51
General	3216	414932	10.54	5.91	0.23	0.28	3104	401334	12.91	1.32	52.72	1.97	34.37	1.88
Specialized or other	3139	401341	9.23	5.76	0.23	0.07	2999	383016	17.22	1.51	55.34	1.99	27.44	1.78
Don't know	5824	742886	8.88	5.87	0.17	0.01	5547	704272	17.66	1.12	57.00	1.45	25.34	1.28
EVER FEEL BORED AT SCHOOL														
Never	922	111730	7.32	6.07	0.45	0.00	875	105603	26.82	3.27	51.79	3.69	21.39	3.02
Once in a while	11185	1395445	10.77	5.91	0.13	0.57	10760	1341503	11.90	0.69	52.51	1.06	35.59	1.01
About half the time	5565	711671	11.35	5.96	0.18	0.67	5369	684425	10.76	0.93	50.04	1.50	39.21	1.47
Most of the time	4869	636087	9.56	5.99	0.19	0.37	4687	612012	15.76	1.17	54.17	1.60	30.07	1.47

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 5-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by student attitudes and goals

	Sample	Weighted	Test Score Statistics				# With Scores		Percent of Students Performing at each Proficiency Level: < Basic		Basic		Intermed		Advanced	
	n	n	Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
LOCUS OF CONTROL																
Low	7666	982798	11.64	10.37	0.27	0.00	7103	911679	28.42	1.15	44.52	1.27	17.27	0.97	9.78	0.76
Middle	10890	1388622	17.45	11.04	0.24	0.51	10081	1283654	14.95	0.77	39.46	1.05	24.02	0.92	21.56	0.88
High	4943	605013	19.78	11.20	0.36	0.72	4603	562068	11.40	1.01	34.79	1.52	26.07	1.40	27.73	1.43
SELF CONCEPT																
Low	9448	1216302	15.38	11.11	0.26	0.00	8745	1126216	20.18	0.92	40.94	1.13	21.88	0.95	17.00	0.87
Middle	7808	988062	16.16	11.18	0.28	0.07	7243	917650	17.83	0.97	41.34	1.25	21.83	1.05	19.00	0.99
High	6266	775622	16.74	11.75	0.33	0.12	5820	716801	17.62	1.08	37.47	1.37	23.13	1.19	21.79	1.17
STUDENT'S POST SECONDARY PLANS																
Won't finish high school	321	43573	5.61	8.62	1.08	0.00	297	40555	53.90	6.23	34.58	5.95	6.12	3.00	5.40	2.83
High school only	2207	313155	8.29	8.21	0.39	0.24	2048	290190	33.95	2.26	49.61	2.38	13.74	1.64	2.70	0.77
Vocational, trade, business school	2027	279626	10.95	9.36	0.47	0.47	1889	260267	29.24	2.26	47.43	2.48	17.17	1.88	6.15	1.20
Attend college	2953	387933	11.80	9.63	0.40	0.55	2730	357171	24.67	1.78	47.10	2.06	20.30	1.66	7.92	1.11
Graduate from college	9895	1270319	17.85	10.68	0.24	1.08	9172	1178991	13.64	0.77	40.13	1.10	24.95	0.97	21.28	0.92
Higher level after college	6087	676924	21.33	11.52	0.33	1.39	5646	626753	10.98	0.90	29.30	1.31	25.21	1.25	34.51	1.36
EXPECTED HIGH SCHOOL PROGRAM																
Academic/college prep	7026	853914	21.81	11.05	0.30	0.81	6559	794703	9.48	0.78	29.84	1.22	25.63	1.17	35.05	1.28
Vocational, technical, business	4009	527768	12.65	10.08	0.36	0.00	3740	491543	23.33	1.50	46.49	1.76	19.83	1.41	10.35	1.08
General	3215	414596	16.11	10.90	0.43	0.31	2980	384359	18.48	1.53	40.52	1.94	23.16	1.67	17.84	1.51
Specialized or other	3138	401047	13.43	10.21	0.41	0.07	2876	369644	22.14	1.66	46.02	1.99	21.38	1.64	10.46	1.22
Don't know	5819	741841	13.37	10.64	0.31	0.06	5374	685248	23.44	1.24	44.40	1.46	20.19	1.18	11.97	0.95
EVER FEEL BORED AT SCHOOL																
Never	922	111692	11.09	10.73	0.79	0.00	864	105123	32.13	3.44	40.60	3.62	16.77	2.76	10.50	2.26
Once in a while	11175	1393541	16.75	11.22	0.24	0.50	10407	1299555	15.81	0.77	41.01	1.04	22.93	0.89	20.25	0.85
About half the time	5565	711270	17.95	11.27	0.34	0.61	5176	659025	15.91	1.10	37.41	1.45	23.71	1.28	22.96	1.26
Most of the time	4864	635652	14.36	11.09	0.36	0.29	4481	586160	23.50	1.36	40.68	1.58	20.62	1.30	15.20	1.15

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 5-c--Test score statistics of 1988 eighth graders, science test, by student attitudes and goals

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
LOCUS OF CONTROL						
Low	7673	981844	7.89	5.44	0.14	0.00
Middle	10873	1385417	10.61	5.51	0.12	0.48
High	4937	603751	11.54	5.61	0.18	0.64
SELF CONCEPT						
Low	9455	1216446	9.52	5.62	0.13	0.00
Middle	7792	985229	10.02	5.60	0.14	0.09
High	6259	772889	10.33	5.91	0.17	0.14
STUDENT'S POST SECONDARY PLANS						
Won't finish high school	322	43679	4.43	4.86	0.61	0.00
High school only	2207	312793	6.56	4.63	0.22	0.37
Vocational, trade, business school	2025	279097	8.01	5.10	0.25	0.63
Attend college	2951	387103	7.98	4.95	0.20	0.62
Graduate from college	9883	1266826	10.70	5.38	0.12	1.10
Higher level after college	6087	676829	12.22	5.91	0.17	1.36
EXPECTED HIGH SCHOOL PROGRAM						
Academic/college prep	7020	852875	12.57	5.66	0.15	0.72
Vocational, technical, business	4007	526656	8.48	5.16	0.18	0.00
General	3217	414779	10.00	5.42	0.21	0.27
Specialized or other	3131	399275	8.71	5.26	0.21	0.04
Don't know	5818	741122	8.60	5.40	0.16	0.02
EVER FEEL BORED AT SCHOOL						
Never	923	111759	7.17	5.45	0.40	0.00
Once in a while	11162	1389615	10.24	5.59	0.12	0.54
About half the time	5559	709873	10.85	5.64	0.17	0.65
Most of the time	4865	635348	9.21	5.74	0.18	0.36

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 5-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by student attitudes and goals

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
LOCUS OF CONTROL						
Low	7635	977752	12.20	7.57	0.19	0.00
Middle	10838	1381237	16.10	7.16	0.15	0.51
High	4921	602260	17.77	7.02	0.22	0.73
SELF CONCEPT						
Low	9408	1210699	14.52	7.60	0.18	0.00
Middle	7774	983919	15.31	7.44	0.19	0.10
High	6234	770128	15.91	7.68	0.22	0.18
STUDENT'S POST SECONDARY PLANS						
Won't finish high school	318	43191	7.50	6.35	0.80	0.00
High school only	2192	311260	10.09	6.68	0.32	0.34
Vocational, trade, business school	2010	277722	12.36	6.85	0.34	0.64
Attend college	2947	386862	12.66	7.01	0.29	0.68
Graduate from college	9855	1264110	16.31	6.99	0.16	1.16
Higher level after college	6064	673888	18.42	7.39	0.21	1.44
EXPECTED HIGH SCHOOL PROGRAM						
Academic/college prep	6992	849648	18.77	7.05	0.19	0.74
Vocational, technical, business	3988	524797	13.50	7.00	0.25	0.05
General	3202	413641	15.47	7.07	0.28	0.31
Specialized or other	3119	397405	13.40	7.21	0.29	0.04
Don't know	5805	739938	13.12	7.47	0.22	0.00
EVER FEEL BORED AT SCHOOL						
Never	919	111567	11.52	7.71	0.57	0.00
Once in a while	11126	1386076	15.59	7.45	0.16	0.53
About half the time	5540	707573	16.44	7.39	0.22	0.65
Most of the time	4843	632935	14.30	7.56	0.24	0.37

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 6-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by student television and outside reading behavior

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
HOURS OF TV ON WEEKDAYS														
None, or less than 1 hour	2741	302678	11.10	6.45	0.28	0.29	2640	289159	13.60	1.47	47.80	2.14	38.60	2.08
1-2 Hours	4862	598402	11.79	5.86	0.19	0.40	4697	576954	9.43	0.94	49.18	1.61	41.38	1.58
2-3 Hours	4765	618692	11.27	5.88	0.19	0.32	4584	596851	10.40	0.99	51.73	1.62	37.87	1.57
3-4 Hours	3699	483283	10.85	5.70	0.21	0.25	3536	461384	10.26	1.12	54.25	1.83	35.49	1.76
4-5 Hours or more	5160	682367	9.37	5.77	0.18	0.00	4952	654010	15.04	1.11	55.65	1.55	29.31	1.42
HOW MUCH OUTSIDE READING PER WEEK														
None	4604	592546	7.84	5.53	0.18	0.00	4396	564530	21.67	1.36	57.68	1.63	20.65	1.34
One hour or less	7282	921521	9.81	5.75	0.15	0.33	6986	882789	14.02	0.91	56.09	1.30	29.89	1.20
Two hours	4550	579367	10.93	5.83	0.19	0.51	4388	558729	11.48	1.06	53.05	1.66	35.46	1.59
Three hours or more	6062	751966	13.18	5.72	0.16	0.88	5891	730562	6.75	0.72	42.42	1.42	50.83	1.44

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 6-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by student television and outside reading behavior

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
HOURS OF TV ON WEEKDAYS																
None, or less than 1 hour	2739	302246	17.66	12.24	0.52	0.35	2556	281567	18.12	1.65	33.78	2.02	21.58	1.76	26.52	1.89
1-2 Hours	4863	598157	19.21	11.35	0.36	0.49	4500	553281	13.90	1.11	34.30	1.52	24.85	1.39	26.95	1.43
2-3 Hours	4767	618751	17.99	10.88	0.35	0.38	4435	574969	14.62	1.15	38.50	1.58	24.58	1.40	22.31	1.35
3-4 Hours	3699	483278	16.78	10.69	0.39	0.27	3404	444004	15.54	1.33	43.23	1.82	23.28	1.56	17.95	1.41
4-5 Hours or more	5155	681616	13.68	10.50	0.33	0.00	4776	631283	21.74	1.29	44.68	1.55	21.24	1.28	12.35	1.03
HOW MUCH OUTSIDE READING PER WEEK																
None	4595	591598	12.52	10.59	0.35	0.00	4239	547321	26.40	1.46	44.15	1.64	18.39	1.28	11.06	1.04
One hour or less	7283	921066	15.67	11.12	0.29	0.28	6785	856695	18.97	1.03	42.07	1.30	21.03	1.07	17.92	1.01
Two hours	4543	578113	16.93	11.17	0.37	0.39	4238	539080	16.65	1.24	38.84	1.62	24.32	1.43	20.19	1.33
Three hours or more	6057	750896	19.65	11.12	0.32	0.63	5625	696848	11.93	0.93	34.80	1.37	26.01	1.26	27.26	1.28

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 6-c--Test score statistics of 1988 eighth graders, science test, by student television and outside reading behavior

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
HOURS OF TV ON WEEKDAYS						
None, or less than 1 hour	2740	302415	10.64	6.27	0.27	0.32
1-2 Hours	4860	597859	11.42	5.66	0.18	0.45
2-3 Hours	4763	617773	10.78	5.49	0.18	0.34
3-4 Hours	3693	482033	10.24	5.50	0.20	0.25
4-5 Hours or more	5155	679242	8.82	5.35	0.17	0.00
HOW MUCH OUTSIDE READING PER WEEK						
None	4598	590919	8.05	5.36	0.18	0.00
One hour or less	7271	917552	9.60	5.55	0.15	0.27
Two hours	4537	577068	10.40	5.62	0.19	0.41
Three hours or more	6055	750822	11.89	5.58	0.16	0.67

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 6-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by student television and outside reading behavior

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
HOURS OF TV ON WEEKDAYS						
None, or less than 1 hour	2709	300907	15.90	8.07	0.35	0.23
1-2 Hours	4843	595653	16.76	7.29	0.23	0.35
2-3 Hours	4752	616302	16.31	7.24	0.24	0.29
3-4 Hours	3681	480484	15.89	7.28	0.27	0.23
4-5 Hours or more	5134	676029	14.11	7.32	0.23	0.00
HOW MUCH OUTSIDE READING PER WEEK						
None	4584	589407	12.56	7.26	0.24	0.00
One hour or less	7250	915029	14.73	7.46	0.20	0.29
Two hours	4527	576094	15.88	7.40	0.25	0.44
Three hours or more	6023	747752	17.94	7.10	0.20	0.71

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 7-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by grades and time spent on homework

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
AVERAGE SELF-REPORTED GRADES														
Low quartile	5538	735388	6.99	5.15	0.16	0.00	5231	693678	23.84	1.28	60.04	1.47	16.13	1.11
Second quartile	5039	659059	8.72	5.40	0.17	0.29	4812	629024	17.11	1.19	59.28	1.55	23.61	1.34
Third quartile	5888	729916	10.64	5.57	0.16	0.60	5663	700619	10.66	0.90	55.39	1.45	33.94	1.38
High quartile	6895	843368	14.36	5.21	0.14	1.22	6719	821055	4.48	0.56	38.10	1.31	57.42	1.33
GRADES SINCE 6TH GRADE IN ENGLISH														
Mostly A's	7607	944182	13.13	5.87	0.15	1.10	7389	915951	7.43	0.67	42.30	1.27	50.27	1.28
Mostly B's	8838	1103589	10.39	5.66	0.13	0.65	8475	1056803	12.34	0.78	54.34	1.19	33.32	1.12
Mostly C's	4926	650231	8.03	5.26	0.17	0.26	4693	619001	18.49	1.24	61.76	1.55	19.75	1.27
Mostly D's or below	1540	210980	6.47	5.02	0.29	0.00	1449	197672	26.83	2.53	57.57	2.82	15.59	2.07
HOURS OF HOMEWORK PER WEEK														
2 or less hours	3505	477576	9.32	6.08	0.23	0.00	3370	458484	16.92	1.42	53.70	1.89	29.38	1.72
2.5 Hours	4000	519217	9.71	5.81	0.21	0.06	3836	496236	14.11	1.23	55.65	1.76	30.24	1.63
3 To 5 hours	7530	958813	10.18	5.84	0.15	0.14	7214	917891	13.27	0.88	54.87	1.28	31.86	1.20
More than 5 hours	7585	907096	11.88	6.05	0.16	0.42	7348	878916	10.65	0.79	46.62	1.28	42.74	1.27
HOURS OF ENGLISH HOMEWORK PER WEEK														
None	2405	328245	8.93	6.21	0.28	0.00	2315	314877	19.29	1.80	52.71	2.28	28.00	2.05
Less than one hour	10403	1347658	10.30	5.84	0.13	0.23	9994	1293601	12.74	0.73	54.85	1.09	32.41	1.03
One hour	5001	630972	10.37	5.97	0.19	0.24	4802	606762	13.31	1.08	52.45	1.58	34.24	1.50
Two hours	2271	275698	11.81	6.05	0.28	0.48	2201	266395	11.17	1.48	46.44	2.34	42.39	2.32
Three hours or more	2359	256834	12.55	5.97	0.28	0.60	2287	248308	8.81	1.31	43.56	2.29	47.63	2.30

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 7-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by grades and time spent on homework

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
AVERAGE SELF-REPORTED GRADES																
Low quartile	5524	733725	9.18	8.48	0.26	0.00	5084	674338	33.48	1.42	48.10	1.51	14.89	1.07	3.54	0.56
Second quartile	5042	659382	12.50	9.55	0.30	0.29	4648	607356	23.36	1.33	48.33	1.58	19.53	1.25	8.79	0.89
Third quartile	5892	729984	16.41	10.29	0.30	0.64	5472	679546	14.38	1.02	43.94	1.45	25.49	1.27	16.19	1.07
High quartile	6895	842792	24.51	10.05	0.27	1.35	6457	787474	5.70	0.63	23.95	1.15	27.90	1.21	42.45	1.33
GRADES SINCE 6TH GRADE IN MATHEMATICS																
Mostly A's	7894	974847	21.44	11.33	0.29	1.20	7376	910471	9.75	0.75	30.97	1.17	25.98	1.11	33.31	1.19
Mostly B's	8091	1027840	16.58	10.40	0.26	0.77	7496	950580	15.43	0.90	41.85	1.23	25.13	1.08	17.59	0.95
Mostly C's	4914	640772	11.37	9.29	0.30	0.31	4533	591919	25.76	1.40	49.57	1.60	17.47	1.21	7.20	0.83
Mostly D's or below	1970	260631	7.88	7.94	0.40	0.00	1797	237149	39.86	2.47	45.42	2.51	11.69	1.62	3.02	0.86
HOURS OF HOMEWORK PER WEEK																
2 or less hours	3495	476376	14.06	11.14	0.42	0.00	3202	436959	24.24	1.62	41.53	1.87	19.52	1.50	14.71	1.34
2.5 Hours	3997	518487	14.51	10.58	0.37	0.04	3717	482800	20.89	1.44	43.06	1.75	21.68	1.46	14.37	1.24
3 To 5 hours	7523	957707	15.22	10.78	0.28	0.10	7011	892479	18.53	1.00	43.09	1.28	22.97	1.09	15.41	0.93
More than 5 hours	7584	906252	19.56	11.59	0.30	0.49	7064	842642	13.32	0.87	34.07	1.22	23.80	1.10	28.80	1.16
HOURS OF MATHEMATICS HOMEWORK PER WEEK																
None	1864	256501	12.26	10.88	0.56	0.00	1721	238061	31.15	2.40	37.82	2.52	19.41	2.05	11.62	1.66
Less than one hour	9381	1197633	14.66	10.58	0.24	0.21	8689	1108609	20.11	0.93	44.08	1.15	22.06	0.96	13.75	0.80
One hour	5176	661379	15.17	10.91	0.34	0.26	4828	615803	18.18	1.20	43.13	1.54	22.21	1.29	16.49	1.16
Two hours	2351	298318	19.50	11.22	0.52	0.64	2191	278446	13.22	1.56	35.34	2.21	25.04	2.00	26.39	2.04
Three hours or more	3782	438693	22.59	11.17	0.41	0.91	3523	408076	8.85	1.03	28.60	1.65	23.87	1.55	38.68	1.77

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 7-c--Test score statistics of 1988 eighth graders, science test, by grades and time spent on homework

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
AVERAGE SELF-REPORTED GRADES						
Low quartile	5534	734938	7.03	4.90	0.15	0.00
Second quartile	5033	656295	8.52	5.04	0.16	0.26
Third quartile	5883	727678	10.08	5.24	0.15	0.53
High quartile	6889	841908	13.42	5.34	0.14	1.12
GRADES SINCE 6TH GRADE IN SCIENCE						
Mostly A's	6951	857613	12.96	5.59	0.15	1.19
Mostly B's	7929	992066	10.19	5.28	0.13	0.70
Mostly C's	5527	718679	8.07	4.88	0.15	0.33
Mostly D's or below	2293	311113	6.19	4.59	0.21	0.00
HOURS OF HOMEWORK PER WEEK						
2 or less hours	3489	474075	9.05	5.76	0.22	0.00
2.5 Hours	3998	518079	9.31	5.54	0.20	0.04
3 To 5 hours	7520	956115	9.61	5.46	0.14	0.10
More than 5 hours	7575	905052	11.38	5.76	0.15	0.41
HOURS OF SCIENCE HOMEWORK PER WEEK						
None	3781	498292	9.20	5.77	0.21	0.00
Less than one hour	10147	1294287	10.00	5.64	0.13	0.14
One hour	4611	589061	9.89	5.58	0.18	0.12
Two hours	2049	252385	11.18	5.59	0.28	0.35
Three hours or more	1871	203282	11.37	5.88	0.30	0.38

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 7-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by grades and time spent on homework

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
AVERAGE SELF-REPORTED GRADES						
Low quartile	5513	732702	11.05	6.85	0.21	0.00
Second quartile	5020	654300	13.39	6.88	0.22	0.31
Third quartile	5859	724956	15.54	6.96	0.20	0.59
High quartile	6857	838838	19.85	6.59	0.18	1.16
GRADES SINCE 6TH GRADE IN SOCIAL STUDIES						
Mostly A's	7275	897395	19.10	7.09	0.19	1.24
Mostly B's	7656	962101	15.77	6.79	0.17	0.80
Mostly C's	5071	661378	12.60	6.71	0.21	0.38
Mostly D's or below	2469	330626	9.71	6.50	0.29	0.00
HOURS OF HOMEWORK PER WEEK						
2 or less hours	3478	473460	13.88	7.88	0.30	0.00
2.5 hours	3978	515666	14.62	7.42	0.26	0.10
3 To 5 hours	7495	953546	14.85	7.32	0.19	0.13
More than 5 hours	7556	902817	17.01	7.43	0.19	0.41
HOURS OF SOCIAL STUDIES HOMEWORK PER WEEK						
None	3026	405257	14.19	7.92	0.32	0.00
Less than one hour	9269	1190175	15.22	7.46	0.17	0.14
One hour	5089	647915	14.96	7.33	0.23	0.10
Two hours	2440	302651	16.61	7.49	0.34	0.32
Three hours or more	2474	274798	17.21	7.44	0.34	0.40

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 8-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by grade repetition and class type

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
MATH CLASS TYPE														
Adv. Math/Algebra	8147	964066	13.10	5.76	0.14	1.14	7914	935004	7.58	0.66	41.69	1.22	50.74	1.24
Regular Math	12691	1675474	9.52	5.65	0.11	0.55	12173	1606058	14.31	0.70	57.85	0.98	27.84	0.89
Remedial Math	1145	147431	6.18	4.99	0.33	0.00	1085	138907	28.86	3.00	58.93	3.26	12.21	2.17
No Math class	749	93046	7.36	5.86	0.48	0.20	702	87240	26.70	3.62	54.28	4.08	19.02	3.21
ENGLISH CLASS TYPE														
Regular English	18610	2373091	11.05	5.91	0.10	0.81	17961	2286606	11.23	0.52	51.58	0.82	37.18	0.79
Remedial English	2871	345857	8.63	5.91	0.25	0.41	2731	329040	18.99	1.64	55.21	2.08	25.80	1.83
No English	996	127825	6.17	5.09	0.36	0.00	942	120798	28.84	3.22	56.88	3.52	14.28	2.48
EVER HELD BACK A GRADE IN SCHOOL														
No	18257	2291849	11.43	5.85	0.10	0.73	17618	2208534	9.93	0.50	50.76	0.83	39.30	0.81
Yes	3691	483850	7.03	5.13	0.19	0.00	3520	461378	23.81	1.57	59.71	1.81	16.47	1.37
REPEATED KINDERGARTEN														
No	21444	2713165	10.73	5.96	0.09	0.51	20655	2610503	12.09	0.50	52.22	0.76	35.69	0.73
Yes	568	71392	7.65	5.74	0.54	0.00	543	67417	26.24	4.13	54.28	4.68	19.48	3.72

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 8-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by grade repetition and class type

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
MATH CLASS TYPE																
Adv. Math/algebra	8145	963888	23.06	11.08	0.27	1.37	7560	891407	8.86	0.71	25.67	1.08	23.76	1.06	41.71	1.22
Regular math	12681	1673196	13.43	9.69	0.19	0.52	11797	1558087	20.81	0.81	47.79	0.99	22.70	0.83	8.70	0.56
Remedial math	1138	146231	7.54	8.27	0.55	0.00	1048	135889	41.63	3.27	43.30	3.29	12.74	2.21	2.33	1.00
No math class	749	93222	9.78	9.72	0.80	0.20	690	86055	33.25	3.86	44.04	4.06	16.70	3.05	6.01	1.95
ENGLISH CLASS TYPE																
Regular English	18593	2370036	17.33	11.19	0.18	0.85	17273	2201038	15.99	0.60	39.20	0.80	23.33	0.69	21.48	0.67
Remedial Englis	2867	345164	13.01	10.72	0.45	0.47	2674	323401	24.45	1.80	43.33	2.07	20.20	1.68	12.02	1.36
No English	996	127844	7.72	8.43	0.60	0.00	913	116876	36.60	3.42	47.28	3.54	12.56	2.35	3.56	1.31
EVER HELD BACK A GRADE IN SCHOOL																
No	18248	2290541	18.18	11.05	0.18	0.80	16971	2128700	14.36	0.58	38.05	0.81	24.47	0.71	23.12	0.70
Yes	3688	482790	9.16	8.86	0.33	0.00	3414	448500	31.34	1.71	48.86	1.84	15.07	1.32	4.73	0.78
REPEATED KINDERGARTEN																
No	21436	2711255	16.72	11.23	0.17	0.49	19917	2519335	17.12	0.58	39.78	0.75	22.96	0.64	20.14	0.61
Yes	563	70784	11.20	10.24	0.97	0.00	526	65763	28.53	4.26	44.81	4.69	16.78	3.53	9.89	2.82

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 8-c--Test score statistics of 1988 eighth graders, science test, by grade repetition and class type

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
MATH CLASS TYPE						
Adv. Math/Algebra	8132	961137	12.44	5.76	0.14	1.06
Regular Math	12669	1669558	9.11	5.23	0.10	0.48
Remedial Math	1143	146763	6.38	4.78	0.32	0.00
No Math class	751	93397	7.07	5.07	0.41	0.12
ENGLISH CLASS TYPE						
Regular English	18571	2364078	10.50	5.65	0.09	0.72
Remedial English	2869	345079	8.50	5.48	0.23	0.37
No English	997	128029	6.40	4.68	0.33	0.00
EVER HELD BACK A GRADE IN SCHOOL						
No	18229	2284935	10.79	5.59	0.09	0.60
Yes	3685	481876	7.34	5.04	0.19	0.00
REPEATED KINDERGARTEN						
No	21412	2704501	10.23	5.65	0.09	0.42
Yes	566	71170	7.82	5.73	0.54	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 8-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by grade repetition and class type

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
MATH CLASS TYPE						
Adv. Math/Algebra	8102	958592	18.48	7.20	0.18	1.11
Regular Math	12633	1665299	14.18	7.09	0.14	0.55
Remedial Math	1134	145955	10.03	6.94	0.46	0.00
No Math class	748	93189	11.48	7.65	0.63	0.19
ENGLISH CLASS TYPE						
Regular English	18507	2356733	15.97	7.36	0.12	0.76
Remedial English	2855	344141	13.43	7.78	0.33	0.43
No English	998	128517	10.19	6.93	0.49	0.00
EVER HELD BACK A GRADE IN SCHOOL						
No	18158	2277705	16.40	7.28	0.12	0.64
Yes	3680	481202	11.50	7.03	0.26	0.00
REPEATED KINDERGARTEN						
No	21339	2696928	15.61	7.46	0.11	0.44
Yes	562	70701	12.26	7.65	0.72	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 9-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by student behavior problems

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
ANY DISCIPLINE PROBLEMS THIS YEAR														
None	13723	1701803	11.66	5.77	0.11	0.62	13275	1645613	9.45	0.56	50.76	0.96	39.80	0.94
Once or twice	3862	490000	9.83	5.92	0.21	0.32	3700	468658	14.25	1.26	54.42	1.80	31.33	1.67
More than twice	5766	766333	7.89	5.84	0.17	0.00	5451	722397	22.25	1.23	54.73	1.47	23.02	1.24
HOW OFTEN CUT OR SKIP CLASSES														
Never or almost never	20613	2606669	10.72	5.98	0.09	0.43	19853	2508445	12.37	0.51	51.80	0.78	35.83	0.75
Sometimes	1984	254115	8.12	5.93	0.30	0.00	1894	241452	22.08	2.09	55.77	2.50	22.16	2.09
EVER COME TO CLASS WITHOUT PENCIL, PAPER														
Usually	1981	256246	7.37	5.81	0.29	0.00	1892	244239	26.27	2.21	52.98	2.51	20.75	2.04
Often	3104	391144	9.76	6.23	0.25	0.40	2980	375620	17.89	1.54	50.12	2.01	31.99	1.88
Seldom	10582	1356474	11.22	5.79	0.13	0.64	10189	1304843	9.63	0.64	52.29	1.09	38.08	1.06
Never	6863	848437	10.66	5.99	0.16	0.54	6621	817025	12.58	0.90	52.76	1.35	34.66	1.29
EVER COME TO CLASS WITHOUT BOOKS														
Usually	882	111937	5.91	5.31	0.40	0.00	843	106909	33.37	3.56	52.96	3.76	13.67	2.59
Often	1337	169824	7.79	5.88	0.36	0.31	1269	160616	24.04	2.62	52.74	3.06	23.22	2.59
Seldom	8903	1124983	11.32	5.86	0.14	0.90	8580	1081651	10.18	0.72	50.59	1.19	39.23	1.16
Never	11086	1403102	10.68	5.92	0.13	0.79	10694	1353756	12.05	0.69	53.26	1.06	34.69	1.01
EVER COME TO CLASS WITHOUT HOMEWORK DONE														
Usually	1741	228384	7.60	5.90	0.32	0.00	1667	217721	25.13	2.33	53.51	2.68	21.37	2.20
Often	2942	387461	9.34	5.94	0.25	0.29	2805	369315	16.31	1.53	54.94	2.05	28.75	1.87
Seldom	11188	1426193	11.19	5.84	0.12	0.59	10787	1372739	10.43	0.65	51.62	1.06	37.95	1.03
Never	6367	772876	10.88	6.01	0.17	0.54	6156	748162	12.22	0.92	51.37	1.40	36.41	1.35

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 9-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by student behavior problems

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
ANY DISCIPLINE PROBLEMS THIS YEAR																
None	13723	1701695	18.28	11.06	0.21	0.58	12788	1585499	13.02	0.64	39.15	0.93	24.23	0.82	23.60	0.81
Once or twice	3866	490052	15.13	11.09	0.40	0.30	3587	454442	19.85	1.44	42.41	1.78	21.68	1.48	16.06	1.32
More than twice	5748	763672	11.71	10.64	0.31	0.00	5273	699874	30.52	1.36	40.92	1.45	18.04	1.14	10.52	0.91
HOW OFTEN CUT OR SKIP CLASSES																
Never or almost never	20601	2603995	16.70	11.28	0.18	0.44	19142	2419151	16.84	0.58	40.14	0.77	22.79	0.65	20.23	0.63
Sometimes	1977	253167	11.74	10.66	0.54	0.00	1833	234089	33.26	2.37	38.03	2.45	17.97	1.93	10.74	1.56
EVER COME TO CLASS WITHOUT PENCIL, PAPER																
Usually	1976	255655	10.77	10.64	0.54	0.00	1820	236940	36.10	2.42	38.08	2.45	15.75	1.84	10.06	1.52
Often	3102	390678	15.04	11.37	0.46	0.38	2862	359157	23.02	1.69	38.29	1.96	22.00	1.67	16.68	1.50
Seldom	10578	1355461	17.57	11.04	0.24	0.60	9844	1261163	14.54	0.77	39.84	1.07	24.08	0.93	21.54	0.90
Never	6856	846910	16.52	11.34	0.31	0.51	6392	788262	16.47	1.00	41.35	1.33	22.05	1.12	20.12	1.08
EVER COME TO CLASS WITHOUT BOOKS																
Usually	876	111186	7.83	9.71	0.73	0.00	808	103323	44.02	3.76	38.87	3.69	9.83	2.25	7.29	1.97
Often	1333	169153	11.51	10.51	0.64	0.33	1218	153589	32.66	2.88	40.70	3.01	17.79	2.35	8.85	1.74
Seldom	8892	1123086	17.75	11.09	0.26	0.88	8252	1040638	15.42	0.86	38.23	1.15	24.12	1.02	22.23	0.99
Never	11088	1402646	16.61	11.20	0.24	0.78	10342	1308660	16.10	0.78	41.40	1.05	22.69	0.89	19.82	0.85
EVER COME TO CLASS WITHOUT HOMEWORK DONE																
Usually	1738	228148	10.83	10.34	0.56	0.00	1602	211286	33.59	2.54	41.39	2.65	15.47	1.94	9.54	1.58
Often	2933	386259	14.00	10.90	0.45	0.28	2700	355231	24.29	1.77	41.54	2.04	19.75	1.65	14.41	1.45
Seldom	11184	1424575	17.50	11.05	0.23	0.59	10412	1323861	15.20	0.76	39.63	1.04	23.97	0.90	21.20	0.87
Never	6363	772050	17.19	11.52	0.32	0.56	5936	721044	15.31	1.01	39.58	1.37	22.95	1.18	22.15	1.17

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 9-c--Test score statistics of 1988 eighth graders, science test, by student behavior problems

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
ANY DISCIPLINE PROBLEMS THIS YEAR						
None	13694	1695629	10.90	5.49	0.11	0.51
Once or twice	3864	489692	9.60	5.74	0.21	0.28
More than twice	5763	764658	8.00	5.62	0.17	0.00
HOW OFTEN CUT OR SKIP CLASSES						
Never or almost never	20587	2599519	10.24	5.66	0.09	0.42
Sometimes	1975	252441	7.83	5.65	0.28	0.00
EVER COME TO CLASS WITHOUT PENCIL, PAPER						
Usually	1972	253880	7.53	5.64	0.28	0.00
Often	3102	390599	9.49	5.71	0.23	0.34
Seldom	10565	1351252	10.64	5.58	0.12	0.54
Never	6854	847187	10.11	5.66	0.15	0.45
EVER COME TO CLASS WITHOUT BOOKS						
Usually	878	110975	6.18	5.41	0.41	0.00
Often	1330	168749	7.66	5.57	0.34	0.26
Seldom	8891	1121838	10.79	5.62	0.13	0.81
Never	11072	1398794	10.14	5.58	0.12	0.69
EVER COME TO CLASS WITHOUT HOMEWORK DONE						
Usually	1734	226750	7.59	5.65	0.30	0.00
Often	2933	385707	9.19	5.65	0.23	0.28
Seldom	11178	1422341	10.65	5.59	0.12	0.53
Never	6356	770626	10.22	5.67	0.16	0.46

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 9-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by student behavior problems

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
ANY DISCIPLINE PROBLEMS THIS YEAR						
None	13657	1691188	16.47	7.20	0.14	0.50
Once or twice	3843	488332	14.81	7.70	0.28	0.29
More than twice	5737	761639	12.64	7.61	0.23	0.00
HOW OFTEN CUT OR SKIP CLASSES						
Never or almost never	20515	2591687	15.60	7.48	0.12	0.40
Sometimes	1967	251657	12.53	7.81	0.39	0.00
EVER COME TO CLASS WITHOUT PENCIL, PAPER						
Usually	1962	252501	11.76	7.80	0.39	0.00
Often	3091	389934	14.55	7.94	0.32	0.37
Seldom	10527	1347159	16.19	7.16	0.16	0.58
Never	6834	844817	15.46	7.57	0.21	0.49
EVER COME TO CLASS WITHOUT BOOKS						
Usually	871	110134	9.58	7.61	0.58	0.00
Often	1326	168190	12.09	7.83	0.48	0.33
Seldom	8868	1118792	16.42	7.25	0.17	0.90
Never	11028	1395032	15.49	7.40	0.16	0.78
EVER COME TO CLASS WITHOUT HOMEWORK DONE						
Usually	1726	225864	12.10	7.75	0.42	0.00
Often	2920	384002	13.92	7.66	0.32	0.24
Seldom	11137	1418544	16.12	7.24	0.15	0.53
Never	6340	768807	15.80	7.60	0.21	0.49

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 10-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by parent involvement in school-related activities

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
PARENTS CHECK IF HOMEWORK DONE														
Often	10318	1326598	10.22	5.98	0.13	0.04	9913	1271660	13.75	0.76	52.44	1.10	33.80	1.04
Sometimes	6945	879602	9.98	6.02	0.16	0.00	6643	839858	14.79	0.95	53.62	1.34	31.60	1.25
Rarely or never	6260	777159	10.96	6.09	0.17	0.16	6011	745865	12.00	0.92	51.08	1.42	36.91	1.37
PARENTS LIMIT TV WATCHING TIME														
Often	3646	417496	10.89	6.18	0.23	0.14	3501	398800	13.23	1.26	48.13	1.85	38.64	1.81
Sometimes	5539	685295	10.93	6.12	0.18	0.15	5319	658240	12.80	1.01	49.18	1.50	38.02	1.46
Rarely or never	14274	1873457	10.02	5.94	0.11	0.00	13688	1794007	13.94	0.65	54.57	0.93	31.49	0.87
DISCUSSED WITH PARENTS: SELECTING COURSES/PROGRAM														
Not at all	3459	432418	7.98	5.90	0.22	0.00	3265	407082	21.34	1.56	55.50	1.89	23.16	1.61
Once or twice	10708	1372796	9.92	5.91	0.13	0.32	10270	1314907	14.43	0.76	54.67	1.08	30.90	1.00
Three or more times	9080	1142653	11.89	5.80	0.14	0.65	8773	1103007	9.24	0.68	48.54	1.17	42.22	1.16
DISCUSSED WITH PARENTS: THINGS YOU'VE STUDIED														
Not at all	2620	344269	8.04	5.78	0.25	0.00	2492	327528	21.69	1.80	56.44	2.17	21.86	1.81
Once or twice	8360	1077029	9.50	5.80	0.14	0.24	7985	1028664	14.93	0.87	55.86	1.22	29.20	1.11
Three or more times	12317	1531574	11.54	5.97	0.12	0.58	11882	1473699	10.45	0.62	49.21	1.01	40.34	0.99
PARENTS' EDUCATIONAL ASPIRATIONS FOR STUDENT														
High school or less	1040	148514	6.11	5.07	0.35	0.00	989	140709	28.72	3.14	56.57	3.44	14.71	2.46
Some post-high school	3253	446105	7.78	5.26	0.21	0.28	3099	424036	20.07	1.57	61.28	1.91	18.65	1.53
College graduate or more	16878	2081208	11.55	5.89	0.10	0.90	16259	2003831	10.19	0.52	49.52	0.86	40.29	0.85
Don't know	1174	152006	8.42	5.84	0.38	0.38	1118	144192	18.87	2.56	57.37	3.23	23.77	2.78
PLANNED HS PROGRAM WITH MOTHER/FATHER														
Not at all	2050	262912	8.32	5.82	0.29	0.00	1935	246733	19.05	1.94	56.62	2.45	24.33	2.12
Once or twice	8234	1048119	9.81	5.99	0.15	0.25	7898	1004390	15.13	0.88	54.14	1.23	30.72	1.14
Three or more times	13018	1638437	11.12	5.95	0.12	0.46	12534	1576116	11.33	0.62	50.71	0.98	37.96	0.95

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 10-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by parent involvement in school-related activities

	Sample n	Weighted n	Test Score Statistics				# With Scores		Percent of Students Performing at each Proficiency Level							
									< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
PARENTS CHECK IF HOMEWORK DONE																
Often	10313	1325727	15.64	11.24	0.25	0.03	9573	1229903	18.55	0.86	41.08	1.09	22.20	0.92	18.17	0.85
Sometimes	6937	878113	15.33	11.14	0.30	0.00	6447	814477	20.23	1.08	41.33	1.32	21.06	1.10	17.38	1.02
Rarely or never	6265	777806	17.37	11.49	0.33	0.18	5784	718086	17.24	1.07	37.45	1.37	23.47	1.20	21.84	1.17
PARENTS LIMIT TV WATCHING TIME																
Often	3646	417324	17.14	11.76	0.44	0.16	3374	386024	17.69	1.42	36.99	1.79	21.82	1.53	23.50	1.57
Sometimes	5537	684156	17.09	11.56	0.35	0.15	5160	636981	16.72	1.12	38.25	1.46	22.50	1.26	22.53	1.26
Rarely or never	14268	1873053	15.37	11.05	0.21	0.00	13212	1733182	19.60	0.74	41.64	0.92	22.20	0.78	16.57	0.70
DISCUSSED WITH PARENTS: SELECTING COURSES/PROGRAM																
Not at all	3463	433097	11.36	10.52	0.40	0.00	3197	397870	29.53	1.74	43.03	1.88	17.88	1.46	9.56	1.12
Once or twice	10702	1371306	15.45	11.01	0.24	0.36	9925	1272678	19.15	0.85	41.51	1.07	22.36	0.90	16.98	0.81
Three or more times	9074	1141665	18.70	11.20	0.26	0.65	8432	1059735	13.29	0.80	37.73	1.14	23.84	1.00	25.14	1.02
DISCUSSED WITH PARENTS: THINGS YOU'VE STUDIED																
Not at all	2613	343551	12.21	10.57	0.46	0.00	2396	315510	28.32	1.97	42.86	2.17	18.03	1.68	10.79	1.36
Once or twice	8346	1075133	14.45	10.77	0.26	0.20	7769	999559	20.34	0.99	43.89	1.22	20.84	1.00	14.93	0.87
Three or more times	12329	1532501	18.11	11.38	0.23	0.52	11437	1420547	14.86	0.72	37.20	0.98	24.20	0.86	23.74	0.86
PARENTS' EDUCATIONAL ASPIRATIONS FOR STUDENT																
High school or less	1036	147970	8.21	8.43	0.59	0.00	967	137301	35.95	3.34	48.86	3.48	12.19	2.28	3.01	1.19
Some post-high school	3255	446318	10.97	9.42	0.37	0.24	3023	413216	26.79	1.74	48.46	1.96	17.53	1.49	7.22	1.02
College graduate or more	16879	2080540	18.32	11.23	0.19	0.89	15653	1930565	14.42	0.61	36.87	0.83	24.61	0.74	24.11	0.74
Don't know	1166	150767	12.08	10.36	0.68	0.34	1059	137175	28.66	2.97	42.82	3.25	19.48	2.60	9.03	1.88
PLANNED HS PROGRAM WITH MOTHER/FATHER																
Not at all	2049	263057	12.28	10.64	0.53	0.00	1889	241905	28.04	2.22	41.85	2.44	19.32	1.95	10.79	1.54
Once or twice	8230	1046848	15.19	11.15	0.28	0.26	7641	971790	20.29	0.99	41.44	1.22	21.56	1.02	16.70	0.92
Three or more times	13012	1637083	17.31	11.29	0.22	0.44	12072	1517871	15.57	0.71	39.20	0.96	23.31	0.83	21.91	0.81

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 10-c--Test score statistics of 1988 eighth graders, science test, by parent involvement in school-related activities

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
PARENTS CHECK IF HOMEWORK DONE						
Often	10306	1323226	9.80	5.64	0.12	0.04
Sometimes	6933	876260	9.57	5.61	0.15	0.00
Rarely or never	6260	776741	10.45	5.84	0.17	0.16
PARENTS LIMIT TV WATCHING TIME						
Often	3641	415944	10.33	5.88	0.22	0.12
Sometimes	5533	683629	10.41	5.76	0.17	0.14
Rarely or never	14262	1869682	9.63	5.61	0.11	0.00
DISCUSSED WITH PARENTS: SELECTING COURSES/PROGRAM						
Not at all	3459	431463	7.86	5.55	0.21	0.00
Once or twice	10694	1368245	9.66	5.57	0.12	0.31
Three or more times	9070	1140925	11.11	5.60	0.13	0.57
DISCUSSED WITH PARENTS: THINGS YOU'VE STUDIED						
Not at all	2616	342730	8.12	5.57	0.24	0.00
Once or twice	8338	1072852	9.21	5.46	0.13	0.19
Three or more times	12317	1529871	10.87	5.70	0.12	0.48
PARENTS' EDUCATIONAL ASPIRATIONS FOR STUDENT						
High school or less	1040	148463	6.29	4.79	0.33	0.00
Some post-high school	3255	445844	7.74	5.04	0.20	0.25
College graduate or more	16858	2075707	10.92	5.65	0.10	0.81
Don't know	1170	151377	8.31	5.52	0.36	0.35
PLANNED HS PROGRAM WITH MOTHER/FATHER						
Not at all	2049	262220	8.34	5.59	0.28	0.00
Once or twice	8221	1044371	9.59	5.66	0.14	0.22
Three or more times	13005	1635343	10.44	5.66	0.11	0.37

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 10-d--Test score statistics of 1988 eighth grade, history/citizenship/government test, by parent involvement in school-related activities

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
PARENTS CHECK IF HOMEWORK DONE						
Often	10259	1318561	15.04	7.43	0.16	0.05
Sometimes	6909	873389	14.64	7.65	0.21	0.00
Rarely or never	6240	774468	15.89	7.70	0.22	0.16
PARENTS LIMIT TV WATCHING TIME						
Often	3613	414257	15.66	7.80	0.29	0.11
Sometimes	5514	681249	15.78	7.76	0.23	0.13
Rarely or never	14221	1864058	14.82	7.45	0.14	0.00
DISCUSSED WITH PARENTS: SELECTING COURSES/PROGRAM						
Not at all	3443	430276	12.34	7.66	0.29	0.00
Once or twice	10653	1362900	14.78	7.52	0.16	0.32
Three or more times	9039	1137824	16.84	7.15	0.17	0.59
DISCUSSED WITH PARENTS: THINGS YOU'VE STUDIED						
Not at all	2608	341189	12.86	7.65	0.34	0.00
Once or twice	8307	1069927	14.30	7.39	0.18	0.19
Three or more times	12267	1524765	16.37	7.45	0.15	0.46
PARENTS' EDUCATIONAL ASPIRATIONS FOR STUDENT						
High school or less	1030	148005	9.87	6.85	0.48	0.00
Some post-high school	3236	443733	12.18	6.86	0.27	0.30
College graduate or more	16806	2069499	16.60	7.33	0.13	0.88
Don't know	1165	150823	12.57	7.46	0.49	0.35
PLANNED HS PROGRAM WITH MOTHER/FATHER						
Not at all	2034	260643	12.57	7.53	0.37	0.00
Once or twice	8197	1041714	14.60	7.61	0.19	0.27
Three or more times	12955	1630238	16.04	7.40	0.15	0.46

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 11-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by parent-school contact

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
1ST SEMESTER: PARENTS WARNED ABOUT ATTENDANCE														
Never	20582	2590652	10.77	5.97	0.09	0.63	19807	2489516	12.13	0.51	52.01	0.78	35.86	0.75
Once or twice	2036	270783	7.89	5.79	0.29	0.16	1931	256804	21.80	2.05	55.96	2.46	22.24	2.06
More than twice	598	79210	6.93	5.69	0.52	0.00	562	74248	27.43	4.09	51.74	4.58	20.84	3.72
1ST SEMESTER: PARENTS WARNED ABOUT GRADES														
Never	14945	1860501	11.45	5.96	0.11	0.59	14419	1792114	10.46	0.56	49.77	0.92	39.77	0.90
Once or twice	6639	864277	8.76	5.66	0.16	0.14	6322	822565	17.40	1.04	57.30	1.36	25.30	1.20
More than twice	1672	220876	7.91	5.84	0.32	0.00	1593	209970	23.03	2.31	55.64	2.72	21.34	2.24
1ST SEMESTER: PARENTS WARNED ABOUT BEHAVIOR														
Never	18354	2300910	11.03	5.90	0.10	0.63	17712	2218416	11.24	0.52	51.87	0.83	36.89	0.80
Once or twice	3554	464626	8.52	5.99	0.23	0.22	3348	436541	19.55	1.49	54.41	1.87	26.04	1.65
More than twice	1332	178451	7.21	5.79	0.36	0.00	1259	168156	26.33	2.70	53.78	3.06	19.89	2.45

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 11-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by parent-school contact

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
1ST SEMESTER: PARENTS WARNED ABOUT ATTENDANCE																
Never	20572	2588120	16.85	11.22	0.18	0.68	19102	2402438	16.17	0.57	40.36	0.77	22.99	0.66	20.48	0.63
Once or twice	2036	271090	11.07	10.40	0.52	0.17	1888	249969	33.79	2.35	39.69	2.43	17.33	1.88	9.19	1.43
More than twice	594	78717	9.11	9.95	0.91	0.00	537	71674	42.71	4.55	33.54	4.34	16.72	3.43	7.03	2.35
1ST SEMESTER: PARENTS WARNED ABOUT GRADES																
Never	14939	1858536	18.19	11.38	0.21	0.65	13923	1731533	14.20	0.64	37.54	0.89	24.20	0.78	24.06	0.78
Once or twice	6637	864194	12.91	10.30	0.28	0.19	6101	792839	24.13	1.18	45.25	1.37	19.31	1.09	11.31	0.87
More than twice	1666	220207	10.78	9.68	0.53	0.00	1533	203597	33.65	2.59	42.05	2.71	17.66	2.09	6.65	1.37
1ST SEMESTER: PARENTS WARNED ABOUT BEHAVIOR																
Never	18359	2300655	17.20	11.21	0.19	0.59	17087	2140970	15.48	0.60	40.10	0.81	23.26	0.70	21.16	0.68
Once or twice	3543	463178	12.75	10.98	0.41	0.20	3264	425172	26.69	1.66	41.24	1.85	19.26	1.48	12.81	1.26
More than twice	1324	177437	10.51	10.04	0.62	0.00	1193	160642	37.57	2.98	37.35	2.98	17.23	2.32	7.86	1.66

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 11-c--Test score statistics of 1988 eighth graders, science test, by parent-school contact

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
1ST SEMESTER: PARENTS WARNED ABOUT ATTENDANCE						
Never	20554	2582752	10.30	5.63	0.09	0.65
Once or twice	2033	270403	7.70	5.51	0.27	0.20
More than twice	599	79333	6.56	5.36	0.49	0.00
1ST SEMESTER: PARENTS WARNED ABOUT GRADES						
Never	14917	1853798	10.84	5.67	0.10	0.56
Once or twice	6639	863656	8.62	5.35	0.15	0.17
More than twice	1670	220043	7.64	5.53	0.30	0.00
1ST SEMESTER: PARENTS WARNED ABOUT BEHAVIOR						
Never	18333	2294715	10.47	5.60	0.09	0.55
Once or twice	3547	463133	8.38	5.67	0.21	0.19
More than twice	1330	177978	7.32	5.51	0.34	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 11-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by parent-school contact

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
1ST SEMESTER: PARENTS WARNED ABOUT ATTENDANCE						
Never	20479	2575036	15.73	7.41	0.12	0.71
Once or twice	2030	270274	11.84	7.67	0.38	0.19
More than twice	593	78357	10.37	7.54	0.69	0.00
1ST SEMESTER: PARENTS WARNED ABOUT GRADES						
Never	14869	1849126	16.43	7.45	0.14	0.55
Once or twice	6612	860693	13.34	7.33	0.20	0.14
More than twice	1661	218857	12.28	7.21	0.40	0.00
1ST SEMESTER: PARENTS WARNED ABOUT BEHAVIOR						
Never	18271	2288613	15.89	7.41	0.12	0.52
Once or twice	3536	462347	13.14	7.67	0.29	0.16
More than twice	1319	176050	11.96	7.43	0.46	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 12-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by school type and organization

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
SCHOOL TYPE														
Public	18572	2638591	9.97	6.03	0.10	0.00	17777	2524366	14.61	0.58	53.44	0.82	31.95	0.77
Catholic	2507	225238	12.26	5.59	0.25	0.38	2399	215551	8.61	1.25	47.37	2.23	44.03	2.22
Independent	1575	30196	15.48	4.87	0.28	0.91	1544	29564	3.86	1.09	28.05	2.54	68.09	2.63
Other private	988	106710	13.26	5.51	0.39	0.54	954	103440	7.00	1.82	42.78	3.53	50.22	3.56
STRUCTURE: GRADES SPANNED														
Elementary through grade 8	5371	664038	11.20	5.88	0.18	0.21	5136	635734	11.53	0.98	50.91	1.53	37.56	1.48
Middle school, junior high	14346	1950314	9.95	6.07	0.11	0.00	13730	1863335	14.64	0.66	52.88	0.93	32.49	0.88
Beyond grade 8	3925	386383	10.64	6.06	0.22	0.11	3808	373852	13.32	1.21	52.08	1.79	34.60	1.70
SELECTIVITY														
Not selective	18974	2643691	10.09	6.03	0.10	0.00	18177	2531391	14.26	0.57	53.17	0.81	32.57	0.76
Selective	3982	285167	12.52	5.76	0.20	0.40	3851	274410	8.59	0.99	45.42	1.77	45.99	1.77

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 12-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by school type and organization

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
SCHOOL TYPE																
Public	18547	2634948	15.43	11.31	0.19	0.00	17215	2441919	19.87	0.66	41.05	0.81	21.41	0.67	17.67	0.63
Catholic	2514	225681	17.96	10.38	0.46	0.22	2311	207877	13.16	1.51	38.20	2.17	29.24	2.03	19.39	1.77
Independent	1577	30221	28.27	9.13	0.52	1.13	1473	28166	4.43	1.16	10.66	1.74	21.95	2.33	62.96	2.72
Other private	990	107145	21.05	10.25	0.73	0.50	903	98220	9.07	2.04	31.73	3.31	25.38	3.10	33.81	3.37
STRUCTURE: GRADES SPANNED																
Elementary through grade 8	5376	664110	16.89	10.96	0.33	0.12	4969	614086	16.06	1.12	39.65	1.49	25.74	1.34	18.55	1.19
Middle school, junior high	14324	1947496	15.48	11.41	0.21	0.00	13278	1802161	20.15	0.75	40.66	0.92	20.62	0.76	18.57	0.73
Beyond grade 8	3928	386388	16.66	11.32	0.40	0.10	3655	359936	16.96	1.34	38.84	1.74	23.61	1.52	20.59	1.45
SELECTIVITY																
Not selective	18956	2640498	15.56	11.25	0.18	0.00	17599	2447853	19.55	0.65	41.02	0.80	21.81	0.67	17.62	0.62
Selective	3984	285440	19.79	11.16	0.40	0.37	3672	262924	11.40	1.13	33.24	1.67	25.43	1.55	29.92	1.63

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 12-c--Test score statistics of 1988 eighth graders, science test, by school type and organization

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
SCHOOL TYPE						
Public	18537	2630497	9.66	5.72	0.09	0.00
Catholic	2512	225453	10.70	5.18	0.23	0.18
Independent	1577	30221	14.64	5.40	0.30	0.87
Other private	989	106850	11.91	5.37	0.38	0.39
STRUCTURE: GRADES SPANNED						
Elementary through grade 8	5372	663800	10.39	5.57	0.17	0.13
Middle school, junior high	14314	1942627	9.63	5.73	0.11	0.00
Beyond grade 8	3929	386594	10.19	5.75	0.21	0.10
SELECTIVITY						
Not selective	18969	2643307	9.74	5.70	0.09	0.00
Selective	3955	277471	11.33	5.56	0.20	0.28

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 12-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by school type and organization

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
SCHOOL TYPE						
Public	18473	2621066	14.68	7.62	0.13	0.00
Catholic	2508	225165	17.87	6.64	0.30	0.42
Independent	1575	30178	21.26	5.96	0.34	0.87
Other private	968	106495	18.02	6.76	0.49	0.44
STRUCTURE: GRADES SPANNED						
Elementary through grade 8	5368	663279	16.30	7.32	0.22	0.22
Middle school, junior high	14256	1934197	14.65	7.65	0.14	0.00
Beyond grade 8	3900	385429	15.35	7.62	0.27	0.09
SELECTIVITY						
Not selective	18926	2637302	14.84	7.60	0.12	0.00
Selective	3950	276994	17.90	6.95	0.25	0.40

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 13-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by school demographics

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
GEOGRAPHIC REGION														
New England	1094	133915	11.27	6.07	0.41	0.28	1055	128619	11.49	2.16	48.95	3.39	39.56	3.31
Middle Atlantic	3603	440304	11.10	6.03	0.23	0.26	3433	418343	12.10	1.22	49.20	1.87	38.71	1.82
South Atlantic	3585	483616	9.55	6.04	0.23	0.00	3427	461800	14.72	1.33	54.30	1.86	30.98	1.73
East South Central	1690	223502	9.60	5.96	0.32	0.01	1607	212521	14.39	1.91	54.72	2.71	30.89	2.52
West South Central	2908	357681	9.70	5.85	0.24	0.02	2807	345250	14.78	1.47	55.14	2.07	30.07	1.90
East North Central	4164	522617	10.64	5.95	0.21	0.18	4033	505984	13.91	1.20	52.23	1.73	33.86	1.64
West North Central	1792	254165	11.20	6.00	0.32	0.27	1740	247086	10.78	1.64	51.68	2.64	37.54	2.56
Mountain	1417	200354	10.09	6.04	0.36	0.09	1359	190658	13.98	2.06	53.90	2.97	32.12	2.78
Pacific	3389	384583	10.10	6.19	0.24	0.09	3213	362658	15.75	1.40	50.39	1.92	33.86	1.82
COMMUNITY TYPE														
Urban	7282	747083	9.59	6.17	0.16	0.00	6941	705649	16.83	0.98	51.39	1.31	31.78	1.22
Suburban	9854	1308378	10.89	6.01	0.14	0.21	9449	1253669	12.62	0.75	50.70	1.13	36.68	1.09
Rural	6506	945274	10.08	5.92	0.16	0.08	6284	913603	13.01	0.93	55.32	1.38	31.67	1.29
PERCENT MINORITY STUDENTS IN GRADE 8														
0-4%	7153	989107	11.40	5.84	0.15	0.63	6902	953675	10.80	0.82	50.50	1.32	38.70	1.29
5-19%	5983	749110	11.39	5.92	0.17	0.63	5806	726060	10.23	0.88	50.68	1.45	39.09	1.41
20-49%	4889	592096	10.10	6.07	0.19	0.42	4711	568520	14.23	1.12	52.69	1.60	33.08	1.51
50-100%	5087	618184	7.57	5.58	0.18	0.00	4755	576512	22.56	1.31	57.00	1.55	20.44	1.27
PERCENT IN FREE/SUBSIDIZED LUNCH PROGRAM														
0-4%	6616	672950	12.19	5.91	0.16	0.79	6380	646477	9.72	0.82	45.21	1.37	45.08	1.37
5-19%	6406	882091	10.98	5.92	0.17	0.59	6183	850829	11.66	0.90	52.23	1.40	36.11	1.34
20-49%	6855	942107	9.75	5.94	0.16	0.38	6580	903854	14.49	0.95	54.98	1.35	30.53	1.25
50-100%	3377	449364	7.42	5.43	0.21	0.00	3167	421745	22.38	1.61	58.16	1.90	19.45	1.53
TOTAL SCHOOL ENROLLMENT														
Less than 500	8708	1044545	10.84	5.95	0.14	0.17	8380	1004093	12.64	0.80	51.21	1.20	36.15	1.15
500 to 999	11201	1471091	10.10	6.07	0.13	0.04	10751	1409221	13.99	0.73	53.45	1.06	32.56	0.99
1000 or more	3733	485099	9.83	6.12	0.22	0.00	3543	459606	15.61	1.33	51.40	1.83	33.00	1.72

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 13-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by school demographics

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
GEOGRAPHIC REGION																
New England	1097	134363	17.31	11.35	0.77	0.31	1024	125259	16.57	2.51	37.68	3.28	24.38	2.90	21.38	2.77
Middle Atlantic	3603	439352	17.33	11.68	0.44	0.32	3305	402913	17.06	1.40	37.31	1.80	22.58	1.56	23.05	1.57
South Atlantic	3583	482963	14.09	11.13	0.42	0.03	3313	447298	21.91	1.55	42.89	1.85	20.09	1.50	15.11	1.34
East South Central	1695	224156	13.75	10.91	0.59	0.00	1581	209318	21.12	2.22	44.06	2.70	21.33	2.23	13.48	1.86
West South Central	2912	358060	14.40	10.73	0.45	0.06	2727	335674	20.49	1.68	43.51	2.06	21.87	1.72	14.14	1.45
East North Central	4163	522408	16.59	11.07	0.38	0.25	3886	486591	17.59	1.32	40.53	1.70	22.99	1.46	18.89	1.36
West North Central	1793	254398	19.16	10.90	0.58	0.48	1676	237360	13.22	1.79	36.88	2.55	25.47	2.30	24.42	2.27
Mountain	1415	200444	15.68	11.11	0.66	0.17	1308	184043	19.55	2.36	41.44	2.93	20.36	2.40	18.64	2.32
Pacific	3367	381850	16.09	11.74	0.45	0.21	3082	347723	19.92	1.54	36.64	1.86	21.69	1.59	21.75	1.59
COMMUNITY TYPE																
Urban	7278	745950	14.22	11.46	0.30	0.00	6730	686883	21.40	1.08	41.89	1.30	20.32	1.06	16.39	0.97
Suburban	9837	1305693	17.24	11.38	0.26	0.27	9098	1209008	17.78	0.86	37.16	1.09	22.93	0.95	22.13	0.94
Rural	6513	946352	15.52	10.90	0.30	0.12	6074	880293	18.27	1.07	43.05	1.37	22.49	1.16	16.20	1.02
PERCENT MINORITY STUDENTS IN GRADE 8																
0-4%	7161	989965	18.08	10.92	0.29	0.70	6650	919632	14.53	0.93	38.22	1.29	25.35	1.15	21.90	1.09
5-19%	5980	748909	18.23	11.15	0.32	0.71	5534	693634	15.85	1.06	36.67	1.40	23.79	1.23	23.70	1.23
20-49%	4884	590846	15.64	11.30	0.36	0.48	4551	550827	19.42	1.27	40.98	1.58	20.80	1.30	18.79	1.25
50-100%	5073	616251	10.17	9.99	0.31	0.00	4674	564815	28.60	1.42	47.18	1.57	16.05	1.15	8.17	0.86
PERCENT IN FREE/SUBSIDIZED LUNCH PROGRAM																
0-4%	6623	673629	19.87	11.19	0.31	0.89	6118	623010	13.09	0.93	32.31	1.29	25.43	1.20	29.17	1.25
5-19%	6403	881233	17.47	11.17	0.31	0.68	5951	819564	16.57	1.04	38.63	1.36	22.97	1.18	21.83	1.16
20-49%	6843	940281	14.69	10.90	0.30	0.44	6365	871883	20.16	1.09	43.15	1.34	22.13	1.12	14.55	0.95
50-100%	3369	448315	9.75	9.46	0.37	0.00	3112	412277	29.38	1.76	49.01	1.93	15.21	1.39	6.40	0.94
TOTAL SCHOOL ENROLLMENT																
Less than 500	8701	1043273	16.70	11.11	0.27	0.14	8057	967007	16.99	0.90	39.03	1.17	24.78	1.04	19.20	0.95
500 To 999	11201	1471190	15.69	11.35	0.24	0.05	10384	1360176	19.30	0.84	41.24	1.04	20.79	0.86	18.67	0.82
1000 or more	3726	483531	15.10	11.59	0.43	0.00	3461	449001	21.36	1.50	39.59	1.79	20.55	1.48	18.51	1.43

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 13-c--Test score statistics of 1988 eighth graders, science test, by school demographics

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
GEOGRAPHIC REGION						
New England	1097	134363	10.60	5.94	0.40	0.27
Middle Atlantic	3608	440357	10.52	5.77	0.22	0.26
South Atlantic	3547	474434	9.12	5.65	0.21	0.01
East South Central	1696	224291	9.04	5.47	0.30	0.00
West South Central	2913	358278	9.36	5.52	0.23	0.06
East North Central	4161	522326	10.22	5.71	0.20	0.21
West North Central	1793	254398	11.14	5.65	0.30	0.37
Mountain	1420	201046	10.01	5.51	0.33	0.17
Pacific	3380	383529	9.38	5.80	0.22	0.06
COMMUNITY TYPE						
Urban	7250	738661	8.82	5.73	0.15	0.00
Suburban	9852	1307940	10.36	5.68	0.13	0.27
Rural	6513	946420	10.01	5.63	0.16	0.21
PERCENT MINORITY STUDENTS IN GRADE 8						
0-4%	7164	990631	10.98	5.59	0.15	0.70
5-19%	5983	749365	10.96	5.64	0.16	0.70
20-49%	4886	591238	9.73	5.64	0.18	0.48
50-100%	5052	609644	6.96	4.95	0.16	0.00
PERCENT IN FREE/SUBSIDIZED LUNCH PROGRAM						
0-4%	6625	674098	11.46	5.62	0.15	0.76
5-19%	6405	881846	10.57	5.67	0.16	0.60
20-49%	6817	933144	9.41	5.62	0.15	0.40
50-100%	3378	449395	7.14	4.97	0.19	0.00
TOTAL SCHOOL ENROLLMENT						
Less than 500	8712	1044605	10.26	5.71	0.14	0.16
500 To 999	11211	1472999	9.76	5.68	0.12	0.07
1000 or more	3692	475417	9.35	5.75	0.21	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 13-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by school demographics

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
GEOGRAPHIC REGION						
New England	1094	133563	16.66	7.74	0.52	0.37
Middle Atlantic	3576	438597	16.20	7.55	0.28	0.31
South Atlantic	3521	470495	14.28	7.47	0.28	0.05
East South Central	1693	223930	14.19	7.58	0.41	0.04
West South Central	2910	358081	13.87	7.63	0.32	0.00
East North Central	4159	522023	15.62	7.39	0.26	0.23
West North Central	1792	254277	16.53	7.24	0.38	0.35
Mountain	1417	200542	14.55	7.68	0.46	0.09
Pacific	3362	381395	14.68	7.78	0.30	0.11
COMMUNITY TYPE						
Urban	7225	734626	14.09	7.82	0.21	0.00
Suburban	9790	1302551	15.88	7.51	0.17	0.23
Rural	6509	945727	14.83	7.45	0.21	0.10
PERCENT MINORITY STUDENTS IN GRADE 8						
0-4%	7134	989034	16.44	7.25	0.19	0.66
5-19%	5951	744643	16.55	7.29	0.21	0.68
20-49%	4868	589121	14.97	7.43	0.24	0.47
50-100%	5041	608221	11.42	7.41	0.23	0.00
PERCENT IN FREE/SUBSIDIZED LUNCH PROGRAM						
0-4%	6624	674139	17.46	7.22	0.20	0.78
5-19%	6376	878474	16.01	7.40	0.21	0.59
20-49%	6785	930137	14.31	7.39	0.20	0.36
50-100%	3351	446284	11.54	7.36	0.28	0.00
TOTAL SCHOOL ENROLLMENT						
Less than 500	8704	1043975	15.82	7.46	0.18	0.18
500 To 999	11133	1464068	14.80	7.58	0.16	0.04
1000 or more	3687	474862	14.48	7.86	0.29	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 14-a--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, reading test, by school impediments to learning

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level							
							# With Scores		Below Basic		Basic		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE
TOTAL	23642	3000735	10.31	6.05	0.09	0.00	22674	2872922	13.78	0.50	52.34	0.73	33.88	0.69
STUDENT WAS ROBBED, OFFERED DRUGS, THREATENED														
Never	9313	1157465	11.01	6.01	0.14	0.24	8978	1113944	11.63	0.74	51.69	1.16	36.69	1.12
Once or twice	7506	950584	10.38	6.00	0.16	0.13	7198	909607	13.62	0.89	52.28	1.29	34.11	1.23
More than twice	6332	825093	9.57	6.00	0.17	0.00	6065	790204	15.78	1.03	53.49	1.40	30.74	1.30
I OFTEN FEEL PUT DOWN BY MY TEACHERS														
Strongly agree	1065	136587	8.11	6.13	0.42	0.00	1021	129611	23.54	2.91	51.68	3.43	24.78	2.96
Agree	3881	499099	9.19	5.99	0.22	0.18	3716	478150	17.27	1.36	54.68	1.79	28.05	1.62
Disagree	13038	1657277	10.68	5.95	0.12	0.43	12524	1590862	12.24	0.64	52.50	0.98	35.26	0.94
Strongly disagree	5088	627176	11.23	5.97	0.19	0.52	4915	605292	10.84	0.98	50.34	1.57	38.82	1.53
I DON'T FEEL SAFE AT THIS SCHOOL														
Strongly agree	752	99400	7.50	5.89	0.48	0.00	719	95198	25.79	3.57	51.67	4.08	22.54	3.41
Agree	1889	243983	7.73	5.80	0.30	0.04	1788	230391	23.75	2.19	54.08	2.57	22.17	2.14
Disagree	11252	1460039	10.13	5.90	0.12	0.43	10796	1400913	13.59	0.72	54.38	1.05	32.02	0.99
Strongly disagree	9120	1109706	11.68	5.91	0.14	0.69	8814	1070475	9.53	0.69	49.45	1.17	41.02	1.15
STUDENT DISRUPTIONS GET IN WAY OF LEARNING														
Strongly agree	2158	283840	8.65	5.91	0.28	0.00	2067	271819	18.70	1.88	55.59	2.40	25.71	2.11
Agree	6853	872035	9.36	5.85	0.16	0.12	6572	836236	16.02	0.99	56.23	1.34	27.75	1.21
Disagree	10775	1361128	11.18	5.95	0.13	0.42	10381	1309973	11.17	0.68	50.50	1.08	38.34	1.05
Strongly disagree	3261	400836	11.55	6.02	0.24	0.48	3139	384118	10.53	1.20	48.18	1.96	41.30	1.93
STUDENT VIEW OF TEACHER-STUDENT INTERACTIONS														
Least positive	5472	742373	9.64	5.95	0.18	0.00	5238	709437	15.27	1.09	54.39	1.51	30.34	1.39
Middle	15196	1916754	10.65	6.01	0.11	0.17	14608	1841760	12.63	0.60	52.17	0.91	35.20	0.87
Most positive	2544	280670	10.79	6.18	0.27	0.19	2456	269978	13.57	1.52	48.49	2.22	37.93	2.15

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 14-b--Test score statistics of 1988 eighth graders and percent of students performing at each proficiency level, mathematics test, by school impediments to learning

	Sample n	Weighted n	Test Score Statistics				Percent of Students Performing at each Proficiency Level									
							# With Scores		< Basic		Basic		Intermed		Advanced	
			Mean	SD	SE	EFF	SAMP	WTD	%	SE	%	SE	%	SE	%	SE
TOTAL	23628	2997995	15.95	11.32	0.16	0.00	21902	2776185	18.83	0.57	40.20	0.71	22.14	0.61	18.83	0.57
STUDENT WAS ROBBED, OFFERED DRUGS, THREATENED																
Never	9306	1155896	17.03	11.34	0.26	0.20	8632	1071940	15.74	0.85	40.07	1.14	22.39	0.97	21.80	0.96
Once or twice	7506	950369	16.12	11.33	0.29	0.12	6980	882075	18.09	1.00	40.47	1.27	22.58	1.08	18.86	1.01
More than twice	6324	823978	14.77	11.11	0.31	0.00	5847	762115	22.83	1.18	39.89	1.38	21.70	1.16	15.58	1.02
I OFTEN FEEL PUT DOWN BY MY TEACHERS																
Strongly agree	1065	136535	11.88	10.69	0.73	0.00	980	125931	32.23	3.21	37.96	3.33	19.89	2.74	9.92	2.05
Agree	3876	498384	13.79	11.15	0.40	0.17	3579	458449	25.07	1.56	41.67	1.77	18.70	1.40	14.56	1.27
Disagree	13034	1655597	16.80	11.13	0.22	0.43	12112	1537156	16.31	0.72	40.27	0.96	23.21	0.83	20.21	0.79
Strongly disagree	5080	626173	17.22	11.54	0.36	0.47	4725	584618	15.91	1.15	38.69	1.53	23.49	1.33	21.90	1.30
I DON'T FEEL SAFE AT THIS SCHOOL																
Strongly agree	751	99209	10.60	10.59	0.87	0.00	688	91313	36.91	3.94	35.90	3.92	18.03	3.14	9.16	2.36
Agree	1877	242364	11.71	10.77	0.56	0.10	1741	224042	31.08	2.39	41.34	2.55	16.94	1.94	10.64	1.59
Disagree	11250	1459047	15.81	11.01	0.23	0.46	10439	1351310	18.11	0.81	42.18	1.04	22.07	0.88	17.64	0.80
Strongly disagree	9121	1109447	18.09	11.39	0.27	0.66	8480	1033555	14.36	0.82	37.36	1.13	24.37	1.01	23.90	1.00
STUDENT DISRUPTIONS GET IN WAY OF LEARNING																
Strongly agree	2153	283082	12.23	10.75	0.52	0.00	1992	262475	26.72	2.14	43.18	2.39	17.82	1.85	12.28	1.58
Agree	6854	871399	14.46	10.87	0.29	0.20	6332	804582	20.61	1.09	43.69	1.34	20.58	1.09	15.12	0.97
Disagree	10767	1359720	17.64	11.27	0.24	0.48	10014	1263209	15.42	0.78	38.69	1.05	23.85	0.92	22.04	0.89
Strongly disagree	3257	400350	17.68	11.54	0.45	0.48	3040	373703	17.59	1.49	34.85	1.87	24.57	1.69	22.99	1.65
STUDENT VIEW OF TEACHER-STUDENT INTERACTIONS																
Least positive	5463	741357	14.65	10.91	0.33	0.00	5026	682535	22.49	1.27	40.86	1.49	21.93	1.25	14.72	1.07
Middle	15187	1914337	16.58	11.34	0.21	0.17	14125	1778891	17.10	0.68	40.21	0.89	22.35	0.76	20.34	0.73
Most positive	2544	280534	16.77	11.72	0.52	0.19	2374	262633	17.53	1.69	37.73	2.15	22.97	1.87	21.77	1.83

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 14-c--Test score statistics of 1988 eighth graders, science test, by school impediments to learning

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect Size
TOTAL	23615	2993021	9.87	5.71	0.08	0.00
STUDENT WAS ROBBED, OFFERED DRUGS, THREATENED						
Never	9302	1154577	10.31	5.66	0.13	0.14
Once or twice	7491	947068	9.91	5.61	0.15	0.07
More than twice	6328	823358	9.50	5.81	0.16	0.00
I OFTEN FEEL PUT DOWN BY MY TEACHERS						
Strongly agree	1066	136700	7.86	5.67	0.39	0.00
Agree	3879	498384	8.91	5.75	0.21	0.18
Disagree	13022	1652554	10.27	5.60	0.11	0.42
Strongly disagree	5072	623810	10.50	5.71	0.18	0.46
I DON'T FEEL SAFE AT THIS SCHOOL						
Strongly agree	746	98309	7.05	5.52	0.45	0.00
Agree	1883	243093	7.80	5.71	0.29	0.13
Disagree	11242	1457153	9.82	5.55	0.12	0.48
Strongly disagree	9112	1106271	10.93	5.65	0.13	0.68
STUDENT DISRUPTIONS GET IN WAY OF LEARNING						
Strongly agree	2151	282504	8.24	5.46	0.26	0.00
Agree	6855	870676	9.11	5.53	0.15	0.15
Disagree	10754	1357249	10.68	5.66	0.12	0.43
Strongly disagree	3256	399256	10.77	5.78	0.23	0.44
STUDENT VIEW OF TEACHER-STUDENT INTERACTIONS						
Least positive	5466	740113	9.27	5.62	0.17	0.00
Middle	15173	1911270	10.20	5.68	0.10	0.16
Most positive	2540	279723	10.13	5.83	0.26	0.15

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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Table 14-d--Test score statistics of 1988 eighth graders, history/citizenship/government test, by school impediments to learning

	Sample n	Weighted n	Test Mean	Test SD	Test SE	Effect size
TOTAL	23524	2982905	15.11	7.60	0.11	0.00
STUDENT WAS ROBBED, OFFERED DRUGS, THREATENED						
Never	9267	1151407	15.83	7.62	0.18	0.18
Once or twice	7468	944146	15.17	7.37	0.19	0.10
More than twice	6304	820654	14.45	7.65	0.22	0.00
I OFTEN FEEL PUT DOWN BY MY TEACHERS						
Strongly agree	1061	136232	12.79	7.79	0.54	0.00
Agree	3861	496928	13.72	7.68	0.28	0.12
Disagree	12980	1648179	15.63	7.41	0.15	0.37
Strongly disagree	5056	621669	16.04	7.52	0.24	0.43
I DON'T FEEL SAFE AT THIS SCHOOL						
Strongly agree	746	98295	11.29	7.67	0.63	0.00
Agree	1884	243437	12.15	7.81	0.40	0.11
Disagree	11199	1452075	15.00	7.37	0.16	0.49
Strongly disagree	9073	1102607	16.65	7.35	0.17	0.70
STUDENT DISRUPTIONS GET IN WAY OF LEARNING						
Strongly agree	2146	282060	13.03	7.71	0.37	0.00
Agree	6831	868473	13.99	7.49	0.20	0.13
Disagree	10709	1352576	16.23	7.35	0.16	0.42
Strongly disagree	3247	398010	16.43	7.49	0.29	0.45
STUDENT VIEW OF TEACHER-STUDENT INTERACTIONS						
Least positive	5444	737331	14.45	7.41	0.22	0.00
Middle	15122	1906353	15.48	7.56	0.14	0.14
Most positive	2530	278869	15.66	7.86	0.35	0.16

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 15-a--Reading test score statistics of 1988 eighth graders, race/ethnicity, by socioeconomic status

RACE/ETHNICITY		Socioeconomic Status: Low Quartile	Second Quartile	Third Quartile	High Quartile	Total
ASIAN	unwtd n	282	318	327	572	1500
	wtd n	20753	22491	24981	37304	105571
	Mean	7.30	8.47	10.96	13.98	10.78
	S.D.	5.82	5.64	5.63	5.56	6.25
	S.E.	0.78	0.71	0.70	0.52	0.36
	Effect	0.29	0.48	0.90	1.40	0.87
HISPANIC	unwtd n	1463	676	530	334	3005
	wtd n	148607	70752	53657	31617	304916
	Mean	6.44	8.00	9.30	11.44	7.82
	S.D.	4.83	5.29	5.70	5.91	5.47
	S.E.	0.28	0.46	0.55	0.72	0.22
	Effect	0.15	0.41	0.62	0.97	0.38
BLACK	unwtd n	1167	769	559	359	2858
	wtd n	165543	107122	76614	40447	390195
	Mean	5.54*	7.22	8.33	10.41	7.05
	S.D.	4.59	5.23	5.35	6.11	5.33
	S.E.	0.30	0.42	0.51	0.72	0.22
	Effect	0.00	0.28	0.46	0.81	0.25
WHITE	unwtd n	2526	3654	4110	5466	15756
	wtd n	379546	532115	582213	633732	2127606
	Mean	8.26	10.33	11.60	13.85	11.36
	S.D.	5.42	5.73	5.67	5.39	5.89
	S.E.	0.24	0.21	0.20	0.16	0.11
	Effect	0.45	0.79	1.00	1.37	0.96
AMERICAN INDIAN	unwtd n	118	80	70	40	308
	wtd n	17814	11273	9583	4623	43293
	Mean	6.09	7.45	7.18	8.38	6.93
	S.D.	4.77	4.87	5.54	6.51	5.24
	S.E.	0.98	1.22	1.48	2.31	0.67
	Effect	0.09	0.32	0.27	0.47	0.23
TOTAL	unwtd n	5627	5556	5642	6809	23642
	wtd n	742779	752323	753621	751143	3000735
	Mean	7.17	9.53	10.99	13.53	10.31
	S.D.	5.26	5.75	5.78	5.56	6.05
	S.E.	0.16	0.17	0.17	0.15	0.09
	Effect	0.27	0.66	0.90	1.32	0.79

Note: Effect sizes are in total standard deviation units. The lowest scoring cell, marked with a *, is used as the contrast group.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 15-b--Mathematics test score statistics of 1988 eighth graders, race/ethnicity, by socioeconomic status

RACE/ETHNICITY		Socioeconomic Status: Low Quartile	Second Quartile	Third Quartile	High Quartile	Total
Asian	unwtd n	280	317	325	572	1495
	wtd n	20562	22330	24940	37304	105178
	Mean	13.41	16.17	19.29	26.02	19.86
	S.D.	11.52	11.21	11.26	10.86	12.21
	S.E.	1.54	1.41	1.40	1.02	0.71
	Effect	0.61	0.85	1.13	1.72	1.18
HISPANIC	unwtd n	1459	670	531	334	2996
	wtd n	147995	70054	53826	31617	303775
	Mean	8.60	10.94	13.67	17.76	10.99
	S.D.	8.47	9.45	10.66	11.11	9.87
	S.E.	0.50	0.82	1.04	1.36	0.40
	effect	0.18	0.39	0.63	0.99	0.39
BLACK	unwtd n	1167	770	562	357	2860
	wtd n	165470	107103	76852	40129	390022
	Mean	6.54*	8.38	11.14	15.38	8.85
	S.D.	7.50	8.60	9.45	11.03	9.06
	S.E.	0.49	0.69	0.89	1.31	0.38
	Effect	0.00	0.16	0.41	0.78	0.20
WHITE	unwtd n	2523	3657	4106	5467	15753
	wtd n	378883	532342	581352	633705	2126281
	Mean	11.46	15.74	18.28	23.51	17.99
	S.D.	9.52	10.22	10.46	10.33	11.05
	S.E.	0.42	0.38	0.37	0.31	0.20
	Effect	0.43	0.81	1.04	1.50	1.01
AMERICAN INDIAN	unwtd n	118	79	70	40	307
	wtd n	17814	11163	9583	4623	43183
	Mean	7.03	10.04	11.00	13.62	9.40
	S.D.	6.98	9.41	9.40	11.47	9.03
	S.E.	1.44	2.37	2.52	4.06	1.15
	Effect	0.04	0.31	0.39	0.63	0.25
TOTAL	unwtd n	5619	5552	5639	6810	23628
	wtd n	741460	751560	753008	751098	2997995
	Mean	9.65	14.08	17.11	22.87	15.95
	S.D.	9.14	10.36	10.70	10.71	11.32
	S.E.	0.27	0.31	0.32	0.29	0.16
	Effect	0.27	0.67	0.93	1.44	0.83

Note: Effect sizes are in total standard deviation units. The lowest scoring cell, marked with a *, is used as the contrast group.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 16-a--Reading test score statistics of 1988 eighth graders, race/ethnicity, by student's post secondary plans

RACE/ETHNICITY		Student's Post Secondary Plans: H.S. or Less	Voc School	Attend College	College Grad	Advanced Degree	Total
ASIAN	unwtd n	80	65	160	551	638	1500
	wtd n	7923	5302	12433	38627	40635	105571
	Mean	5.04	7.92	7.74	10.73	13.30	10.78
	S.D.	5.54	5.38	5.08	5.65	5.99	6.25
	S.E.	1.39	1.49	0.90	0.54	0.53	0.36
	Effect	0.09	0.57	0.54	1.04	1.46	1.04
HISPANIC	unwtd n	489	317	497	967	694	3005
	wtd n	52157	32110	50871	98819	64902	304916
	Mean	5.29	6.48	7.12	8.73	9.92	7.82
	S.D.	4.31	4.66	5.14	5.28	6.07	5.47
	S.E.	0.44	0.59	0.52	0.38	0.52	0.22
	Effect	0.13	0.33	0.44	0.70	0.90	0.55
BLACK	unwtd n	248	266	449	1107	763	2858
	wtd n	36947	38890	63034	151069	94561	390195
	Mean	4.47*	5.02	5.89	7.75	8.77	7.05
	S.D.	3.86	4.49	4.61	5.23	5.93	5.33
	S.E.	0.55	0.62	0.49	0.35	0.48	0.22
	Effect	0.00	0.09	0.23	0.54	0.71	0.43
WHITE	unwtd n	1631	1319	1769	7083	3905	15756
	wtd n	247987	194662	251015	957612	466136	2127606
	Mean	6.80	8.77	9.33	12.16	14.59	11.36
	S.D.	5.15	5.43	5.37	5.45	5.27	5.89
	S.E.	0.29	0.34	0.29	0.15	0.19	0.11
	Effect	0.39	0.71	0.80	1.27	1.64	1.14
AMERICAN INDIAN	unwtd n	57	38	48	106	54	308
	wtd n	8279	5811	6856	14289	7093	43293
	Mean	4.59	6.68	6.69	8.51	7.44	6.93
	S.D.	4.26	5.06	5.54	4.84	5.80	5.24
	S.E.	1.26	1.84	1.79	1.05	1.77	0.67
	Effect	0.02	0.36	0.37	0.67	0.49	0.41
TOTAL	unwtd n	2534	2022	2957	9897	6094	23642
	wtd n	357552	278967	388596	1270987	678336	3000735
	Mean	6.23	7.92	8.36	11.25	13.01	10.31
	S.D.	4.98	5.41	5.41	5.66	5.96	6.05
	S.E.	0.22	0.27	0.22	0.13	0.17	0.09
	Effect	0.29	0.57	0.64	1.12	1.41	0.97

Note: Effect sizes are in total standard deviation units. The lowest scoring cell, marked with a *, is used as the contrast group.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

Table 16-b--Mathematics test score statistics of 1988 eighth graders, race/ethnicity, by student's post secondary plans

RACE/ETHNICITY		Student's Post Secondary Plans: H.S. or Less	Voc School	Attend College	College Grad	Advanced Degree	Total
ASIAN	unwtd n	78	65	157	550	638	1495
	wtd n	7642	5302	12188	38584	40635	105178
	Mean	8.37	11.86	13.87	19.50	25.41	19.86
	S.D.	9.48	10.25	9.71	11.44	11.12	12.21
	S.E.	2.40	2.85	1.74	1.09	0.99	0.71
	Effect	0.32	0.62	0.80	1.30	1.82	1.33
HISPANIC	unwtd n	487	316	495	963	695	2996
	wtd n	52028	32001	50730	98180	64885	303775
	Mean	6.12	8.53	9.12	12.72	15.26	10.99
	S.D.	7.66	7.99	9.09	9.55	10.80	9.87
	S.E.	0.78	1.01	0.92	0.69	0.92	0.40
	Effect	0.12	0.33	0.38	0.70	0.93	0.55
BLACK	unwtd n	246	270	450	1108	760	2860
	wtd n	36636	39499	62675	151201	94202	390022
	Mean	4.79*	5.77	6.59	10.09	11.55	8.85
	S.D.	6.75	6.61	7.49	9.05	10.38	9.06
	S.E.	0.96	0.90	0.79	0.61	0.84	0.38
	Effect	0.00	0.09	0.16	0.47	0.60	0.36
WHITE	unwtd n	1631	1321	1768	7084	3901	15753
	wtd n	247864	194820	250936	957353	465217	2126281
	Mean	8.95	12.48	13.65	19.70	24.02	17.99
	S.D.	8.49	9.57	9.55	10.23	10.26	11.05
	S.E.	0.47	0.59	0.51	0.27	0.37	0.20
	Effect	0.37	0.68	0.78	1.32	1.70	1.17
AMERICAN INDIAN	unwtd n	57	38	48	106	54	307
	wtd n	8279	5811	6856	14289	7093	43183
	Mean	5.93	7.31	9.63	12.32	9.87	9.40
	S.D.	6.27	7.41	9.89	8.95	10.31	9.03
	S.E.	1.86	2.69	3.20	1.95	3.14	1.15
	Effect	0.10	0.22	0.43	0.67	0.45	0.41
TOTAL	unwtd n	2528	2027	2953	9895	6087	23628
	wtd n	356728	279626	387933	1270319	676924	2997995
	Mean	7.96	10.95	11.80	17.85	21.33	15.95
	S.D.	8.31	9.36	9.63	10.68	11.52	11.32
	S.E.	0.37	0.47	0.40	0.24	0.33	0.16
	Effect	0.28	0.54	0.62	1.15	1.46	0.99

Note: Effect sizes are in total standard deviation units. The lowest scoring cell, marked with a *, is used as the contrast group.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988: Base Year Student Survey.

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TECHNICAL NOTES

DATA SOURCE

This report is based upon data from the National Education Longitudinal Study of 1988 (NELS:88) base year survey. The NELS:88 study is a survey of 24,599 (93 percent of the targeted sample) eighth grade students, their parents, teachers, and school administrators. The students were selected from 1,035 schools representing each of the fifty states and the District of Columbia. The sample includes students from both public and private schools. Asian and Hispanic students were over sampled for this survey. Sample data can be used to make inferences to the population of about three million students in the eighth grade in the United States. Detailed information on the sample can be found in the NELS:88 Base Year Sample Design Report (Spencer, B., Frankel, M., Ingels, S., Rasinski, K., and Tourangeau, R., *National Education Longitudinal Study of 1988: Base Year Sample Design Report.* Washington, DC, NCES, 1990).

DATA LIMITATIONS

The population of schools in the NELS:88 base year survey was restricted to "regular" public and private schools in the United States. Excluded from the sample were Bureau of Indian Affairs (BIA) schools, special education schools for the handicapped, area vocational schools that do not enroll students directly, and schools for dependents of U.S. personnel overseas. Students who are educated at home or in private tutorial settings, and those who have dropped out of school prior to reaching eighth grade, also fall outside of the NELS:88 base year sample. These exclusions have implications for national inferences based on NELS:88 data, although their impact is believed to be small. For certain groups (for example, American Indians) the impact of these exclusions may be larger, and the users of the data should take this fact into account. It should be kept in mind that due to the small number of American Indians and large standard errors, our ability to detect differences between this group and other groups is limited.

Information from various sources indicates that about ten percent of American Indian children attend schools that are affiliated with the BIA and those operated by American Indian communities under contract to the BIA. Other sources indicate that fewer than 10,000 eighth graders attend Department of Defense Dependent Schools (DODDS) serving dependents of U.S. personnel overseas.

Exclusions were also made within schools. The population of students was defined to exclude those who had substantial language difficulties, who had disabilities that would make participation in the survey difficult, or who were chronic truants or dropouts. Seven ineligibility codes were employed at the time of student sample selection:

A. attends this school only on a part-time basis, primary enrollment at another school.

B. physical disability precludes filling out questionnaires and taking tests.

C. mental disability precludes filling out questionnaires and taking tests.

D. dropout: absent or truant for 20 consecutive days, and is not expected to return to school.

E. does not have English as the mother tongue and has insufficient command of English to complete the NELS:88 questionnaires and tests.

F. has transferred out of the school since roster was compiled.

G. is deceased.

An analysis of eighth graders in the 1,035 schools included in the NELS:88 base year sample shows that of the 201,917 eighth grade students in these schools, 10,853 (5 percent) of them were excluded because they were judged to fall into one of the previously mentioned ineligibility categories. The majority of exclusions were made by a school administrator prior to sampling from the school roster. A small number of students who were missed in this process were designated as excluded by the survey administrator on the day that survey data was collected in the child's school. It is possible that the exclusion of mentally and physically handicapped students and most limited-English-proficient students may affect the estimates presented here in someway. The true effect of excluding these students is unknown, but a study is currently in progress which will attempt to ascertain the degree to which such exclusions affect estimates.

COGNITIVE TESTS

The Reading test included 21 items that measured students' abilities to reproduce detail, comprehend, and make inferences and evaluations of text in four areas (literature, science, poetry and biography). The Mathematics test included 40 items measuring skills in simple arithmetic operations, in using decimals, fractions, and percentages, in understanding the relationships among these operations, and in solving problems. The Science test was composed of 25 items testing the students' factual knowledge, conceptual understanding, and problem-solving skills in the areas of life science, earth science, and chemistry/physical science. The History/Citizenship/Government test, containing 30 items, measured students' knowledge of historical facts, structure of the U. S. government, and influence of geographic and economic conditions on history. For all four tests, the IRT formula score was used to calculate means and standard deviations.

A more detailed description of the content of the individual tests as well as their psychometric characteristics can be found in the NELS:88 Psychometric Report (Rock, D. A. & Pollack, J. M., *Psychometric Report for the NELS:88 Base Year Test Battery*, Washington, DC, NCES, 1991). The cognitive tests were found to be reliable, valid and unbiased.

VARIABLES USED

This section provides definitions for the variables used in the tables. While the possible number of cross-cuts that could be carried out is almost limitless, we have chosen to emphasize those variables that have been shown to be related to students failing to complete their education with an adequate level of skills (cf., Slavin & Madden, 1989). Pallas et al. (1989) argue that some of the main factors in putting students "at risk" of not achieving an acceptable level of skills are poverty status, race/ethnicity, family composition, parents' education, and language background. Variables that were either direct or indirect measures of any one of these predictors of a student's degree of risk were emphasized in the following analysis.

Some of the categories are defined by single items in the student or school questionnaires, others are based on sums or composites of several items or groupings of categorical responses. In some instances, parent and teacher data has been incorporated. Questionnaire item numbers are referenced as data sources, and names of composite variables are included in parentheses if they exist on the public use files. The variables presented here are based on a preliminary file, and in some cases, composite variables are different from those in the public use user manuals and files. Comparison of definitions below with descriptions of composites in the user manuals will clarify any possible discrepancies.

Student Sex, Race/Ethnicity, SES and Birth Year:

Sex (SEX) was taken first from the Student Questionnaire (item 12). If this source was missing, or not available, then the sex variable from school rosters was used. Any records with this variable still missing had sex imputed from the respondent's name. In the small number of cases, where this imputation was impossible, the value for SEX was randomly assigned.

Race/Ethnicity (RACE) was also constructed from several sources of information. The first source was the student's self report (item 31A through 31D). Secondly, if the student information was missing, data from the Parent Questionnaire (item 10a through 10c) were used. Students who reported the American Indian category, but whose parents responded "White, not Hispanic" were recoded to "White, not Hispanic" after a subsample of the parents were interviewed to verify the student's report. For additional detail on which groups are included in different categories, see the Base year Student User Manual (Ingels, et al, 1990).

SES Socioeconomic Status (BYSESQ) was constructed using the following data from the NELS:88 Parent Questionnaire: father/male guardian's educational level (item 30), mother/female guardian's educational level (item 31), father/male guardian's occupation (item 34b), mother/female guardian's occupation (item 37b), and family income (item 80). Occupational data were assigned values using the Duncan SEI. Each non-missing component was

standardized and non-missing components were averaged to yield the SES composite. For cases where all parent data components were missing, (8 percent of the participants), student data were used. These first four components from the student data are the same as those from the parent data. The family income component was replaced by an index created from a list of household items (Student Questionnaire items 35a-p). Student data were used to construct SES if all components based on parent data were missing and at least one component based on student data was not missing. Otherwise, SES was set to missing. For this report, SES is divided into quartiles using weighted percents.

Birth Year was taken directly from BYS11.

Family Demographic Characteristics:

Parents Living in Household was created to specify the adult structure of the eighth graders' household. It is derived from question 8A-D in the Student Questionnaire where students indicated which of a list of people live with them.

Number of Brothers and Sisters was taken directly from BYS32.

Parent Education (Higher of Mother, Father) (BYPARED) is the highest level of education reported by either of the eighth graders' parent/guardians. It was constructed from questions 30 and 31 on the Parent Questionnaire, or if these were missing, from questions 34a and 34b on the Student Questionnaires.

Home Has a Specific Place for Study was taken directly from BYS35A.

Home Has Newspaper, Magazines, Books, Encycl. is a count of the "have" responses to student questions BYS35B, BYS35C, BYS35D, and BYS35M.

Student Language Use:

Speak Other Language Before Starting School was taken directly from Student Questionnaire item BYS17.

Language You Usually Speak Now is based on Student Question BYS20. All languages except English and Spanish were combined as "Other Language."

Language Spoken in the Home (BYHMLANG) is a composite based on information from BYS21, BYS22, and BYS23, which ask if another language is spoken at home, what other language it is, and which is usually used. If student data is inconclusive or not available, Parent Questionnaire items BYP22A, BYP22B, and BYP23 were used. Language use and language dominance are coded.

English Proficiency (BYENGPRO) was taken from Teacher Questionnaire responses. BYT11 and BYT12 were used to determine Limited English Proficiency, Language Minority, or Both. This variable was cross tabulated with Student Questionnaire items BYS27A and BYS27B to construct the categories presented in the table. Note that teacher categorizations of language proficiency were not available for a majority of the students.

Student Attitudes and Goals:

Locus of Control (BYLOCUS1) measures the degree of control eighth graders feel that they have over their lives. It was constructed from items 44c, 44f, and 44g from the student questionnaire. Each of the items was standardized, and all non-missing items were averaged. Any student missing all items was assigned a missing value. For this report, LOCUS OF CONTROL is divided into three levels. The levels contain unequal numbers of students because of the discontinuous nature of the distribution.

Self Concept (BYCNCPT1) is a measure of the eighth grader's self esteem. It was constructed from items 44a, 44d, 44e, and 44h. Each of the items was standardized, and non-missing items were averaged. Any student missing all components was assigned a missing value. For this report, SELF CONCEPT is divided into three levels.

Student's Post Secondary Plans was taken directly from BYS45.

Expected High School Program was taken directly from BYS49.

Ever Feel Bored at School was taken directly from BYS73.

Student Television and Outside Reading Behavior:

Hours of TV on Weekdays was taken directly from BYS42A.

How Much Outside Reading per Week was taken directly from BYS80.

Grades and Time Spent on Homework:

Average Self-Reported Grades (BYGRADE) is an average, with all non-missing elements equally weighted, of the student's self report of grades from sixth grade to eighth grade in four subject areas (English, math, history/citizenship/ government and science). The source is student questionnaire item 81, with grades converted to a 5-point scale (mostly A's = 1,... mostly D's = 4, below D = 5. The average is divided into quartiles based upon weighted percents.

Grades Since 6th Grade in (Subject) was taken directly from BYS81A, BYS81B, BYS81C, or BYS81D.

Hours of Homework per Week (BYHOMEWK) categorizes the number of hours spent doing homework as reported in student questions BYS79A-BYS79E. Categorical responses were recoded to actual hours by assigning midpoints of specified ranges. Non-missing values were summed across subjects.

Hours of Subject Homework per Week was taken directly from BYS79A, B, C, or D. The top four categories were combined since responses were sparse.

Grade Repetition and Class Type:

Math Class Type was taken directly from BYS67a, BYS67b and BYS67c. The following categories were used:

Adv. Math/Algebra (includes those reporting taking algebra only, other enriched math, or algebra and regular math).

Regular Math

Remedial Math (includes those reporting taking regular and remedial math or remedial math only).

No Math Class

English Class Type was taken directly from BYS67b-a and BYS67b-b. The following categories were used:

Regular English

Remedial English (includes those reporting taking remedial only or remedial and regular English).

No English

Consistency checks revealed that reports of course taking were inflated, with students reporting segments of year-long courses as courses. To compensate for this, composite course-taking variables were formed which show patterns of responses across courses within a subject area and which also serve to purify student reports of course taking. Thus, students reporting taking both regular and remedial math classes were classified as remedial math. Those reporting taking both algebra and regular math classes were classified as algebra. Those reporting both English and remedial English or remedial English only were classified as remedial.

Ever Held Back a Grade in School was taken directly from BYS74.

Repeated Kindergarten was taken directly from BYS74A.

Student Behavior Problems:

Any Discipline Problems This Year is a composite of BYS55A, BYS55E, and BYS55F. It is a count of how many times the student was sent to the office for misbehaving, parents were warned about behavior, and student got in a physical fight.

How Often Cut or Skip Classes was taken directly from BYS76.

Ever Come to Class Without Pencil, Paper was taken directly from BYS78A.

Ever Come to Class Without Books was taken directly from BYS78B.

Ever Come to Class without Homework Done was taken directly from BYS78C.

Parent Involvement in School-Related Activities:

Parents Check if Homework Done was taken directly from BYS38A.

Parents Limit TV Watching Time was taken directly from BYS38C.

Discussed w Parents: Selecting Courses/Program was taken directly from BYS36A.

Discussed w Parents: Things You've Studied was taken directly from BYS36C.

Parents' Educational Aspirations for Student is a composite of BYS48A (father or male guardian) and BYS48B (mother or female guardian). The higher of the two parent responses is selected. "Don't Know" is selected only if there is no other response for the other parent. Categories are combined due to small number of responses for some options.

Planned HS Program with Mother/Father is a composite of BYS50A (father or male guardian) and BYS50B (mother or female guardian). The composite consisted of a sum of the two parents, that is, if either answer was "three or more times" or if both answers were "once or twice", the composite was coded as "three or more times."

Parent-School Contact:

1st Semester: Parents Warned About Attendance was taken directly from BYS55C.

1st Semester: Parents Warned About Grades was taken directly from BYS55D.

1st Semester: Parents Warned About Behavior was taken directly from BYS55E.

School Type and Organization:

School Type (G8CTRL) classifies the type of school into public, Catholic, independent or other private based on sampling strata taken from the School Survey Management System. Independent schools are those which belong to the National Association of Independent Schools. The public use data tapes categorize school type by using responses to School Question BYSC4. They include public, Catholic, private religious, and private, non-religious.

Structure: Grades Spanned (G8TYPE, collapsed) classifies the school by all grade levels included in the school as reported in School Questionnaire BYSC1A-N. The "Elementary through Grade 8" category includes schools whose lowest grade circled is Pre-K, K, 1, 3, 4, or 5, and whose highest grade is 8. The "Middle School, Junior High" category encompasses schools that have only grade 6 or 7, through grade 8 or 9. "Beyond Grade 8" includes schools that have Pre-K, K, or 1 through 9, 10 or 12; and also those with grade 6, 7, or 8 through 12.

Selectivity categorizes the selectivity of the school by comparing the number of applicants and the number of admittances as well as reporting whether there are formal procedures for admission, using School Questionnaire items BYSC25, BYSC26, and BYSC27. "Not selective" includes schools with no admissions procedures, as well as those who admit all applicants. "Selective" schools are those that deny admission to at least some of their applicants.

School Demographics:

Geographic Region of the school indicates in which of the 9 census regions the school is located. It was determined by collapsing state information from the Survey Management System. For the public use file, this variable (G8REGON) is being further collapsed into only 4 regions, in accordance with the confidentiality provisions of PL100-297 of 1988.

Community Type (G8URBAN) classifies the urbanicity of the student's school according to information from the Quality Education Databases (QED).

Percent Minority Students in Grade 8 (G8MINOR on the user tape is categorized slightly differently) reflects the percentage of minority students in the eighth grade reported by the school in the school questions BYSC13A-D. Values range from 0-100% and are collapsed into four categories for this report.

Percent in Free/Subsidized Lunch Program (G8LUNCH on the user tape is categorized slightly differently) indicates the percent of free or reduced price lunch at the school, calculated from School Questionnaire items BYSC16A and BYSC2. The resulting percentages were collapsed into four categories for this report.

Total School Enrollment (BYSCENRL on the user tape is categorized slightly differently) categorizes the total enrollment as reported by the school. The values were created by collapsing data from BYSC3 into categories, compatible with QED categories. Missing data were imputed from the QED file.

School Impediments to Learning:

Student was Robbed, Offered Drugs, Threatened comes from a sum of Student questions BYS57A, BYS57B, and BYS57C.

I Often Feel "Put Down" by my Teachers is taken directly from BYS59I.

I Don't Feel Safe at this School is taken directly from BYS59K.

Student Disruptions Get in Way of Learning is taken directly from BYS59L.

Student View of Teacher-Student Interactions is an average of:

BYS59A (Students get along well with teachers.)
BYS59F (The teaching is good.)
BYS59G (Teachers are interested in students.)
BYS59H (When I work hard on schoolwork, my teachers praise my effort.)
BYS59J (Most of my teachers really listen to what I have to say.)

where 1 = Strongly Agree, 2 = Agree, 3 = Disagree, and 4 = Strongly Disagree. The composite is divided into categories of:

Least Positive:	average greater than 2.5, representing a tendency to disagree with these positive statements
Middle:	an average of 1.5 to 2.5, general agreement
Most Positive:	an average of less than 1.5, indicating strong agreement

STANDARD ERRORS

All percents and means reported in the tables are weighted using a design weight for students taking both test and questionnaire, adjusted for non-completion, to population estimates that compensate for oversampling of certain types of schools and students and that adjust for the small amount of non-response. This weight is not available on the public use file. Originally, multiple weights were calculated, including a test + questionnaire weight. However, in order to simplify longitudinal analysis, it was decided to include only the BYQWT on the public use file. However, the Base Year Questionnaire weight, BYQWT, should produce estimates very similar to those in this report. Complex sample designs, such as the one used in the NELS:88 survey, often employ stratification, clustering, and unequal selection probabilities. These designs require procedures for estimating sampling variability that are markedly different from the ones that apply when the data are from a simple random sample. In general, such complex designs yield statistics with larger sampling errors than those from a simple random sample.

The impact of the sample design on the sampling error of a given statistic is often assessed by the design effect, which is the ratio of the actual error variance of the statistic to the variance that would have been obtained for the statistic had it been based on a simple random sample.

Standard errors and design effects were calculated for the four NELS:88 tests. The average design effect across these tests was 2.24. The standard errors which are reported in these tables have been adjusted for the overall design effect. Further details are given in the NELS:88 Base Year Sample Design Report.

SIGNIFICANCE TESTING, EFFECT SIZES, AND CONFIDENCE INTERVALS

All tables present the following information in each cell of the table - actual sample size, weighted sample size, mean test score, standard deviation, standard error, and an effect size. In addition to presenting mean test scores, the reading and mathematics tables also show the percentage of the group scoring at each proficiency level described above, and the standard error of the percentage estimate.

The effect sizes show the mean differences in terms of standard deviation units. Effect sizes are calculated by subtracting mean 1 from mean 2 and dividing by the total standard deviation. All effect sizes are based on contrasts with a single reference group. In the tables, the reference group is those individuals in the cell with the lowest mean score within each category. While any group could serve as the reference group for the effect size contrasts, the group in the table having the lowest mean was selected so that all the effect size contrasts would be positive. The reference group can always be identified as the group with an effect size of 0.0.

The use of effect size contrasts in addition to the usual means allows one to compare mean differences between groups on different tests when the tests are on different scales. In addition to allowing for scale free comparisons, the effect size yields an estimate of the size of the difference that is unaffected by the sample size. While many contrasts will be statistically significant given the sample sizes, only a few may reach practical significance. Effect sizes in the .10 to .20 of a standard deviation range are considered to be small but only approaching practical significance. Effect sizes between .3 and .5 of a standard deviation are considered to be in the "medium" effect size range and to be practically significant (Cohen and Cohen, 1975, Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. New York: John Wiley). Effect sizes that approach a full standard deviation are considered quite large effects.

The actual sample size along with the standard errors are shown in each cell in order to give the reader some guidance with respect to the relative stability and accuracy of the cell means. The cell with the lowest mean serves as a reference group only and thus provides a basis for effect size comparisons, but would probably not be the only contrast that one would be interested in statistically testing. Since the standard errors for the cell means are present in the Tables, the reader can construct simple statistical tests of any contrast of interest.

The estimates with their standard errors may be used to construct confidence intervals, which are ranges that are estimated to include the population percentages with a specified probability or level of confidence. For example, using the sample percent and its standard error, a confidence interval could be constructed that would have a 95 percent probability of including a population percentage within its bounds.

The user of the following descriptive tables might follow a two step procedure in evaluating meaningful differences. First, the user would select variables and contrasts of interest. If any of the selected contrasts' effect sizes differ by .2 or more ("medium" size effect) then he or she might wish to go to a next step - that of using the standard errors in a formal statistical test. To compute a confidence interval, the user can multiply the standard error for each group by 1.96 (.05 level) or 2.58 (.01 level). Add and subtract that number from the mean to get a range or confidence interval for each group. Then, the user can verify whether the two confidence intervals overlap.

READING AND MATHEMATICS PROFICIENCY LEVELS

Each proficiency score level was marked by four items, which were chosen as having similar difficulty and content. Success, or "passing" a level, was defined as answering at least three of the four items correctly. As described in the text of the report, two such levels were defined for Reading, and three for Mathematics. A description of the skills required to pass each item cluster appears below, along with samples of typical items that might mark each level.

Reading

Students read a story, letter, or poem and are asked questions about its content. The "basic" proficiency level is defined by competence in simple reading comprehension, including reproduction of detail and/or the author's main thought. A typical item at this level might ask the student to interpret something implied but not explicitly stated in the passage. Some examples of items are:

> *For what purpose did the character take a specific action? (e.g., why did the boy leave his house?)*
>
> *What assumptions was the character making in doing so?*
>
> *What was the outcome of the action? (e.g., what went wrong?)*

Being proficient at the higher level (advanced) implies the ability to make inferences beyond the author's main thought and/or to understand and evaluate relatively abstract concepts. At this level the student may be called upon to incorporate his or her understanding or knowledge of ideas beyond the scope of the passage's content. The student might be asked:

> *What message did the author intend to convey? (e.g., what is a lesson that can be learned from this story?)*
>
> *What was the state of mind of the character?*
>
> *Which phrase is an example of a particular literary device?*

The two proficiency levels reported for the Reading Comprehension test were:

- Basic - Simple reading comprehension including reproduction of detail and/or the author's main thought.
- Advanced - Ability to make inferences beyond the author's main thought and/or understand and evaluate prose dealing with relatively abstract concepts.

Mathematics

The three Mathematics proficiency levels are defined by the following types of skills:

- Basic - Students who are proficient at this level are able to successfully carry out simple arithmetical operations on whole numbers.
- Intermediate - Students who are proficient at this level have successfully mastered all the basic tasks above as well as having mastered simple operations with decimals, fractions, and roots.

- Advanced - Students who are proficient at this level have mastered the two lower proficiency levels and are able to successfully solve simple problem solving tasks. Unlike the basic and intermediate levels, which require rote application of rules, performance at this level requires conceptual understanding and/or the development of a solution strategy.

"Basic" level items require the ability to successfully carry out simple arithmetical operations on whole numbers. A typical item format might be to present two quantities and ask the student if the first or the second is larger, if they are equal, or if the size relationship cannot be determined from the information given. The quantities presented might contain arithmetic operations, simple algebraic representations, money or measurements. Some examples of two quantities that could be compared:

7 quarters $1.75

$c + d$ $c - d$

31 inches . 3 feet

Simple word problems may also be used, such as number sentences (John has 20 balls. Sue has 45. How many more balls does Sue have than John?).

Intermediate questions require the same basic competencies, plus the addition of mastery of simple operations with decimals, fractions and roots. The "quantitative comparison" format described above might be used, or simple word problems.

Examples:

19.823/5.734 . . 4

How many pencils are needed to give y pencils to each of 3 students?

Advanced level incorporates the ability to successfully master simple problem solving tasks. Unlike the other levels, which require the rote application of rules, performance at this level requires conceptual understanding and/or the development of a solution strategy. Solutions may require some experience with geometry, algebra, or a logical process. Typical word problems might ask:

To give a statement about the area of a particular geometric figure, given the length of a part, such as a radius or side.

To simplify an algebraic expression by combining or canceling terms.

To determine whether quantities expressed in different terms, such as decimals, fractions, and percents, are equivalent. (e.g., 5/5, 1.00, 100%)

Assigning students to one of three proficiency categories for Reading (less than basic proficiency, basic level, and advanced level) and four analogous categories for Mathematics was a straightforward process for the majority of test-takers. Most students answered all, or nearly all, of the 21 Reading items and the 40 Mathematics items. Even if a student had omitted one or more items in a 4-item cluster, a pass/fail determination could be made as long as the remaining three items had been answered correctly, or at least two were answered incorrectly.

On the Mathematics test, a substantial number of students, about 14%, could not be categorized, the majority because they had omitted some of the items necessary to identify level of proficiency. For about half of these students, it was possible to obtain estimates of the students' skills, using evidence provided by the marker items that were present, as well as responses to other items in the rest of the test. This procedure was not applied to reading proficiency, since the amount of missing proficiency level data on this test was relatively small.

Another condition complicating the assignment of proficiency levels was the presence of "reversal" patterns for a small number of students. That is, a student might answer three out of four items at the advanced level correctly, but fail to do so at the basic level that was assumed to underlie higher-level skills. Such a reversal pattern might be a result of a few careless mistakes combined with a few lucky guesses, or could be related to lack of motivation. In any case, it would be inconsistent with the building-block assumption of the proficiency level model. Students with reversal patterns (about 1% for reading, 5.5% for mathematics) were not included in the summary statistics. Comparison of mean test scores for the "reversal" students with those for the sample as a whole indicated that the missing scores were unlikely to have introduced a systematic bias into the national estimates reported in the text.

For more detail on the proficiency scores, refer to the *Psychometric Report for the NELS:88 Base Year Test Battery*, Washington, DC, NCES, 1991.

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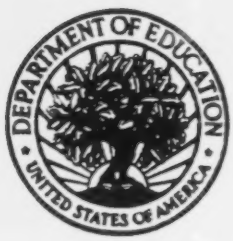

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